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THE INDIAN LANCET.

A Weekly Journal of Medicine, Surgery Public Health and of General Medical Intelligence.

Edited by RUDOLPH MONNIER M.B., M.S., Edin.

Vol. XXXI.] CALCUTTA, MONDAY, MARCH 23rd, 1908. [No. 12

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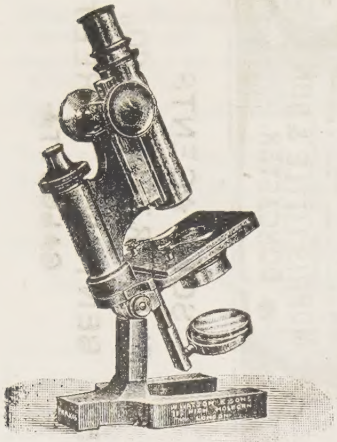

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INDISCRIMINATE PROSTATECTOMY.

By EDWARD MARTIN, M. D.

Because of the low mortality attendant on the operation of prostatectomy, and the admirable results not only in so far as restoration of the normal function of the bladder is concerned, but in the bearing this has upon the general health, there has been a general tendency upon the part of the surgical profession to advocate and practice this operation somewhat indiscriminately, and too often without either the experience which comes only from careful observation of the methods employed by those skilled in this work or that gained by cadaveric practice. This has resulted not only in a somewhat shocking unreported mortality, but in a postoperative crippling of patients in the main entirely avoidable. Although it is true that in many instances the enucleation of one or more prostatic fibro-adenomata may be done with ease, safety, and rapidity by any one who has a fair knowledge of surgical technique, it is equally true that the safe removal of a fibrous prostate or one exhibiting carcinomatous degeneration may be difficult and dangerous, even in the hands of the most expert, and in the case of malignancy is likely to be quite futile, unless the extensive operation advocated and practiced by Young be undertaken.

Moreover, the surgeon or general practitioner who occasionally operates on a prostate is often not even provided with the tools which those most expert consider necessary for the performance of this operation. If before subjecting his first case to surgical procedure he were to attempt with the instruments he customarily uses—i. e., hemostats, retractors, tenaculæ, curettes, cutting instruments, and sounds—to remove from the cadaver the normal prostate by either the perineal or suprapubic route he would more clearly realize not only the difficulties of the operation but the possible sequelæ and complications to which his proposed patient might be subjected.

Fuller, Young, Murphy, Chetwood, Albarran, Freyer, and others of large experience write so fluently and easily of the operation, which through long practice has become to them simple, that they unconsciously convey a false impression to the inexperienced, too often removed only by the needless sacrifice of life or health.

The diagnosis of prostatic hypertrophy is usually based on frequent urination, slowness in starting the stream, lack in its projectile force, and interruptions in its continuity, with aggravation of these symptoms at night, residual urine, and finally increase in the size of the prostate by rectal examination, increase in the urethral length by catheter measurement, deviation in the direction of the prostatic urethra detected by passing solid instruments, and intravesical projections detected by the vesical sound and by the cystoscope. This picture if complete is convincing.

The particular features diagnostic of prostatic enlargement, or at least that form which concerns us—i.e., that which interferes with the function of urination—are increased urethral length and intravesical projections. All the other symptoms can be caused by other conditions. Thus twice I have recently seen two patients referred for prostatectomy in whom the bladder symptoms were early manifestations of locomotor ataxia.

A chronic prostatitis may during its course or as a sequel exhibit all the above symptoms with the exception of prostatic enlargement. The prostate may under these circumstances be unduly small, the obstruction to urine being due to the contraction of the internal vesical sphincter. In addition to the pus usually found in the urine, always obtainable by prostatic and seminal vesical massage, these cases of chronic prostatitis usually exhibit symptoms of posterior urethritis, usually slight in degree and with occasional exacerbations. Urgency and particularly pain, often referred to the end of the penis at the end of urination, constant about the iliosacral junction, radiating to the perineum and downward along the inner surfaces of the thighs, are much more distinctly symptomatic of an inflammation or neoplasm than of enlarged prostate. There is not infrequently in these cases slight terminal hematuria.

Such cases are at times, but not always, greatly benefited by instillations, irrigations, prostatic massage, and overdilatation

of the internal vesical sphincter. For the relief of the symptoms of obstruction, which is a major one when the process of sclerosis and contracture of the internal vesical sphincter is well advanced, I have found overdilatation up to 80 F. at times most serviceable, having had a special instrument constructed for this purpose.

In cases attended by pain so severe as to make each act of urination positive anguish, there is usually an associated vesical calculus which may be the major factor in causing retention of urine because of the constant congestion which by its mechanical irritation it keeps up. Under these circumstances it is sometimes advisable to crush and remove the stone before operating on the prostate. By so doing I have seen the symptoms of prostatic obstruction completely disappear, although there was a small urine residuum which remained sterile and negligible.

These stones are sometimes large, often multiple, usually soft. Preliminary crushing can usually be accomplished by the ordinary lithotrite, though prolonged efforts should not be made when the stones cannot be readily reached and seized with the patient in the Trendelenburg position. After this preliminary crushing and washing it is most important to find practically all the fine fragments, since otherwise they are likely to form nuclei for fresh deposits and thus keep up indefinitely the cystitis from which these calculous prostatics usually suffer. For these purposes of final and thorough cleansing Chismore's instrument is truly admirable. The evacuating tube of this instrument lies in the male blade, to which the aspirator is attached. When the jaws are opened suction draws the small fragments directly within the grip of these blades, where they can be pulverized and withdrawn. This instrument is also extremely serviceable for the crushing and removal of small stones which pass down the ureter but do not escape from the bladder because of a moderate degree of prostatic obstruction. Until these have attained some size it may be extremely difficult to grasp them in the jaws of the ordinary lithotrite.

As to the route by which the prostate should be reached there is even among the experts a diversity of opinion. It is doubtless wise for each surgeon to choose the method with which he is most familiar. The mortality table is distinctly against the suprapubic operation. Young's statistics apparently prove beyond all controversy that the perineal operation is the one of choice, since not only can we remove prostates which would be quite beyond reach suprapubically, but by his ingenious modification the sexual function can be preserved. His low mortality and his functional results are unsurpassed.

In the hands of the unskilled it is probable that more patients will die from the suprapubic operation than from the perineal. It is, however, true that of those patients who recover the ones subject to the perineal operation will exhibit a greater number of distressing complications—i.e., incontinence, impotence, and persistent fistulæ.—THE THERAPEUTIC GAZETTE.

COMMINUTED BONE FRACTURE REPAIRED BY AUXILIARY BLOOD.

Tom R., aged 21; American; diagnosis, Compound Comminuted Fracture of the Humerus. Saw the case September 15th with Dr. R. Examination showed a compound fracture of the humerus, about the center of the shin, involving an inch and a half of the bone, with two external wounds. I strongly urged operation which was consented to by both patient and doctor. Therefore, on September 17, under anæsthesia, I opened down on the humerus, commencing just below the insertion of the deltoid and carrying my incision down for three and one-half inches; being careful not to divide any of the nerve branches. Three small spicula of bone were removed. The periosteum was found to be in a healthy condition. The fragments of bone were brought in apposition and held there by means of small strands of kangaroo tendon adjusted through holes. The periosteum was brought back from the bones, the wound left open and packed gently with bi-sterilized gauze, soaked in bovinine pure. A plaster cast was adjusted, and a trap door made so that the dressings with bovinine might take place without disturbing the splint. The process of repair began and was uninterrupted up to the day of the patient's discharge. Internally, the nurse was ordered to give him a tablespoonful of bovinine in peptonized milk every two hours. October 10th, the kangaroo bone sutures were removed and the wound allowed to heal from the bottom up. October 23d, the wound had almost entirely closed. October 28th, my assistant removed the plaster cast and reported the wound healed and the bone firmly united. It was put in temporary splints, and the patient instructed to return for examination twice a week.

I have had a large and varied experience in the treatment of compound fractures, and until I began the bovinine dressings, in spite of the most approved measures, I had a number of unsatisfactory results; but since employing the bovinine, I have not had a failure. I find that the bone is rapidly and completely regenerated, and a new periosteum rapidly develops and the process of repair becomes complete much sooner than it does otherwise if ever. In my judgment if all compound fractures were treated by the open method with bovinine dressings, the percentage of failures would indeed be small.

ANGINA PECTORIS *

By G. A. Gibson, M.D., Sc.D., LL.D

My first duty is to give expression to the natural feeling of gratification which has been aroused in my mind by the flattering invitation conveyed by the kindness of my friend and your teacher to address you. Such international courtesies seem to me of great value from every point of view. Intercourse with observers in other countries enlarges our knowledge, while it widens our sympathies, and the solidarity of modern science is increased by free interchange of ideas. To myself it is an honour, as it is a pleasure, to be requested to visit your interesting country with which my own has for many centuries had close bonds of union. Such feelings are certain to arise in the mind of anyone belonging to an academic circle, especially when connected with Edinburgh. For many years the illustrious Hermann Boerhaave has been one of my medical heroes, and it is a matter of the greatest interest to remember that, when he was an undergraduate at Leyden, the celebrated Archibald Pitcairne was Professor of Medicine in that famous University. That my distinguished fellow-countryman should have played the part of Mentor to the Telemachus of your still greater compatriot is certainly a matter of deep interest to us in the British Isles.

These reflections, however, take us back to the period when scientific medicine was only in its dawn; in our own era there are abundant reasons for vivid interest in the medical world of the Netherlands. To anyone who, like myself, has been engaged for years in the study of circulatory phenomena, your country holds out some names of world-wide fame. It is only necessary to mention the exhaustive physiological investigations of Engelmann, Hoorweg and Einthoven, which have added new lustre to the ancient universities which they have adorned, and the illuminating clinical researches of Stokvis, Wenckebach and van den Bergh, which have crowned your medical schools with imperishable laurels. Above all, my friendly relations with your own distinguished teacher render my appearance on this occasion particularly gratifying.

The subject to which my attention has been requested for this lecture is angina pectoris, especially in the light of some recent extensions of our knowledge of the affection. Before entering upon the consideration of the subject, let me mention the singular fact that angina pectoris appears to be much less common in the Netherlands than in the British Isles. Professor Wenckebach informs me that this is the case as regards every variety of the condition. It is not easy to account for this difference in distribution. The inhabitants of the two countries are certainly blood relations in a very close degree. Both nations are endowed with a great amount of energy, mental and physical, and their habits are not widely dissimilar The use of tobacco is at least as great on the east side of the North sea as on the west, and the inhabitants of both countries imbibe freely of alcohol; it seems to me, nevertheless, that in the abuse of alcohol my countrymen are greater enemies than you are, especially north of the Tweed, where—to borrow the sardonic phrase of rough old Samuel Johnson*—the people are "without skill in inebriation." † In saying this, I am undoubtedly in antagonism to the opinion expressed by the ingenuous Burton, ‡ Nevertheless, it seems to me that the opinion which has just been expressed is correct. Again, in both countries hard work is the general rule. Possibly the strenuous life has more followers in the United Kingdom than in the Netherlands. When we give full weight to all these considerations, it must be allowed that no sufficient reason can be adduced for the comparative immunity of your fellow countrymen from angina pectoris.

My remarks upon this interesting subject will be mostly clinical and will be especially directed, in accordance with the request which has been made to me, to some symptoms which have recently attracted my attention for the first time. It is inevitable that some reference must be made to the ætiology and pathology of the conditions underlying the complex of symptoms we have to consider, but this will be done as briefly as possible.

The great fact in angina pectoris is the existence of pain, or some analogous subjective result of sensory disturbance; around this predominant symptom the attendant phenomena are variously grouped. The uneasy sensation has its principal seat in the præcordia, and usually, but not invariably, extends thence in different directions. Most typically it radiates towards one or both of the shoulders and arms—to the left, when the cardiac disturbance is mostly connected with the left side of the heart; to the opposite side when the right heart is chiefly involved; to both sides if the heart is bilaterally affected. Very frequently the discomfort affects the region of the angle of the scapula, where indeed it sometimes seems to at-

* An address delivered in the Medical Clinique of the University of Groningen.

* Boswell: The Life of Samuel Johnson, LLD. Edit. 1825. London. Vol. III., p. 370.

† It is probable that the oppressive sumptuary regulations, under which we labour in our northern kingdom, have much to do with the deplorable results which we see, and it cannot be gainsaid that recent experiences in the Modern Athens prove that the extent of drunkenness, with its attendant evils, is directly proportional to the stringency of our licensing laws.

‡ The Anatomy of Melancholy, viii. Edit. 1676. London. Part I., section 2, number 2, subsection 2, p. 44.

tain its greatest intensity. The pain often reaches the fingers, affecting especially the ring end little fingers of the left hand. Sometimes but not nearly so often, it extends up the neck to the back of the head, and occasionally it may pass down to the trunk and even reach the toes of one or other of the lower extremities. We shall afterwards see the reason for such facts of distribution, but let me in this place mention, in passing, that the pain of biliary colic and renal colic, and even of pulmonary congestion or hepatic congestion, has the same tendency to radiate.

The character of the uneasiness and the intensity of the suffering vary enormously. Time would fail me to give you details of the different varieties which are presented; suffice it to say in a single word that there is a complete gradation from vague uneasiness to intolerable anguish.

As regards the occurrence of the chief symptom, one of its predominant characteristics is the paroxysmal mode of onset. The first attack has undoubtedly often proved fatal, but it is common to find repeated paroxysms separated by intervals absolutely free from symptoms; in almost every case, however, the patient has constant uneasiness varied by attacks of greater severity. An important point is that the paroxysms are apt to be induced by exertion, whether muscular, intellectual, or emotional, as well as by digestive conditions We must not make too much of this generally recognised fact, however, for many cases are on record, in which the symptoms have been most urgently present during the night. Although a certain amount of weight must be allowed to the commonly accepted belief that the incidence of an anginous attack after effort of any kind is significant of the graver varieties of the affection, there are, nevertheless, so many exceptions that any rule based on such a conception would be as unwise as it would be misleading. Many other subjective sensations attend the painful feelings, such as faintness and giddiness, tightness and breathlessness, weakness and unsteadiness. The prospect of impending death has been recognised since the early days of our knowledge of angina pectoris, and certainly it is often met with. Many of these sensations can be modified, or even removed, by change of posture and by deep inspiration, but at times the influence of the subjective disturbance is so overwhelming as to prevent any efforts of either kind for fear of increasing the distress. It is generally found that, when the sufferer takes his courage in both hands and alters his position, or draws some deep breaths, he to some extent relieves his symptoms. Patients occasionally complain of weakness of the muscles on the affected side, and this weakness is necessarily found chiefly in the muscles of the upper extremity; they further complain occasionally of tenderness over the areas to which subjective pain is referred. To both of these points further reference will be made.

Turning to the objective aspect of angina pectoris, it may be said that the general appearance of the patient may present the widest variation. From deathly pallor to intense cyanosis; showing an attitude of statuesque immobility, or contortions of intolerable agony; with the skin dry and shrivelled, or with the surface bedewed with drops of perspiration; having an expression which may betoken lively curiosity or gloomy apprehension—patients manifesting all these appearances have been seen by those of us who have had the misfortune to see much of this fell disorder. The wide divergences observed cannot be matter for wonder, seeing that the affection is variable in its severity, and the characteristics of the sufferer may be widely different. On closer examination, the pulse is found to yield information of the most widely divergent kind. The arteries may be healthy or sclerosed; the pressure may be low or high; the rhythm may be regular or otherwise; and the rate may be diminished or increased. In regard to these matters it is probable that some discrepancies which have occurred are due to difficulties of observation, seeing that the physician necessarily abstains as much as possible from disturbing a patient during a period of suffering. But it has fallen to my lot to be able on many occasions to measure the pressure accurately with the sphygmomanometer, and even to take tracings with the sphygmograph during an attack, and the varieties just mentioned have all been recorded.

At times the veins of the neck may be seen standing out like knotted cords, or widely pulsating, but in the cases based upon aortic valvular lesions, the arterial pulsation dominates all the cervical features. There is often evidence on inspection, palpation, and percussion, of increase in the size of the heart. The sounds may be largely obscured by murmurs, particularly in those cases of aortic valve disease just referred to. But at other times they are clear and ringing, or low and muffled, according as dilatation or hypertrophy is in the ascendant. Undoubtedly there is evidence in many cases that the heart is struggling to overtake an obstacle, and frequently of its failure to do so. Over the painful areas there is usually hyperæsthesia, the importance of which has been so thoroughly shown by Mackenzie* and Head† It may be tested by every means which we employ for the estimation of sensibility, and is almost invariably found to show exaltation to every kind

* Medical Chronicle, 1892, Vol. XVI., p. 293; and Lancet, 1895, Vol. I., p. 16

† Brain, 1893, Vol. XVI., p. 1; and 1894, Vol. XVII., p. 339.

of stimulus. But a different state of matters occasionally prevails. After hyperæsthesia has existed for some time it is succeeded by anæsthesia, which, like the preceding exaltation, is found as the regards all kinds of stimuli. Very often there is tenderness of the intercostal and cervical muscles with contraction.

During recent years several instances have been under my notice in which there were further objective appearances of reflex disturbance brought about through the nervous system. To some of these, confessedly rarer than the symptoms just mentioned, attention was directed by me during last year.* Prominence of the left eyeball, with retraction of the eyelid, and dilatation of the pupil, were seen by me recently in a most interesting patient. In this case, along with intense hyperæsthesia over the left half of the chest and the outer aspect of the left arm, there was absolute anæsthesia of the radial half of the hand, both on the palmar and dorsal aspects. There was also weakness of all the muscles of the left arm and forearm, particularly of those on the outer and radial sides. All the muscles affected were flabby in tone; the power of grasping was almost entirely lost; but the muscular response both to mechanical and electric stimuli was increased. On measuring the muscles they were considerably reduced in size. Since the publication of my interesting case a remarkable instance of angina pectoris, with lichen planus over the area of distribution of the intercosto-humeral nerve, where the pain was situated, was described by Gasne and Chiray.† As is well known, the secretions often undergo modification. An abundant flow of urine is common, and increase of saliva is at times also observed.

To have a basis for the explanation of these widespread symptoms, we must turn briefly to the nervous connections between the circulatory organs and the nerve centres. The afferent impulses passing to the centres in connection with the inhibiting and dilating mechanism proceed by way of the vagus nerve. The afferent impulses of the accelerating and constricting mechanism have their course by the inferior cardiac nerve to the inferior cervical ganglion, and thence by the grey rami to the seventh and eighth cervical segments of the cord whence they pass by the annulus of Vieussens to the upper thoracic segments. There is, however, no experimental proof of afferent nerves arising in the heart and reaching the spinal cord. Judging afferent nerves of the visceral system by those belonging to the abdomen, they are always medullated up to the posterior ganglion. It might reasonably be expected that the afferent cardiac nerves must also be medullated; but the nerves between the heart and the annulus of Vieussens are non-medullated. It is probable that the spinal heart nerves are a special example of the vaso-constrictor nerves, and, if the blood vessels possess afferent nerves, the heart, in virtue of its connection with the vaso-constrictor system, must have such nerves. There is evidence of the possession of spinal afferent nerves by the blood vessels, although there is no proof that the blood vessels have any medullated fibres. On the whole it is probable that afferent nerves connected at least with the coronary vessels should accompany the accelerator, and thus account for the clinical facts.

Passing from the receptive end organs, whether of the heart or of the great vessels, by the cardiac nerves to the cervical ganglia of the sympathetic, the impulses enter the spinal cord by the grey rami communicantes, and thence run upwards in the ascending tracts of the spinal cord. In the cortex cerebri the effects produced give rise to sensation, but, as Head* puts it, "the sensory and localising power of the surface of the body is enormously in excess of that of the viscera, and thus, by what might be called a psychical error of judgment, the diffusion area is accepted by consciousness, and the pain is referred on to the surface of the body instead of on to the organ actually affected." The result in angina pectoris is that the patient feels uneasy or painful sensations over the præcordia shoulder and upper extremity. In the interesting case which has been described there can be no doubt of the fact that the cervical sympathetic nerve is involved. The ocular phenomena are sufficient to prove this, and the phenomena furnish conclusive evidence of the contention that the sympathetic system provides the means of conducting afferent impulses from the heart. The afferent impulses in this case reaching the inferior cervical ganglion have undoubtedly separated at that point and taken two different paths, one, as already mentioned, proceeding up by means of the spinal cord to the cerebrum, while the other has passed up the gangliated cord through the middle into the superior cervical ganglion, whence fibres pass to the unstriped fibres of the levator palpebræ superioris, to the muscle of muller, and to the radiating fibres of the iris, accounting for the elevation of the eyelid, the protrusion of the eyeball, and the dilatation of the pupil.

The causes of the impulses, whose course has been traced, are certainly numerous. Aortic, coronary, and myocardial lesions lead to secondary changes by interfering with the nutrition of the heart muscle. This may occur either by diminution of the blood supply, long ago suggested by Allan

* Brain, 1905, Vol. XXVIII., p. 52.

† Gazette des Hopitaux, 1905, p. 463.

* Op. cit., Vol. XVI., p 1.6.

Burns,* or by direct irritation of the sensory nerve endings. Pericardial affections, aneurysms, and tumours occasionally produce symptoms like angina pectoris; but they are, as a rule, not so definite. Further, there can be no doubt that cardiac stress, leading to strain, originally mentioned by Cahen† and Eichwald,‡ may, in the absence of distinct structural alterations, produce a considerable degree of cardiac pain. A recent paper of Mackenzie's§ gives a most excellent summary of our present knowledge of this aspect of the subject. He concludes that angina pectoris will, in all probability, be found to depend upon impairment of the function of contractility. Toxic influences can easily be understood as factors giving rise by irritation to considerable discomfort. Reflex action, taking its origin even in the most distant parts of the body, is by no means an uncommon cause of cardiac pain, acting, as it does, by increasing the strain on the heart. In this connection it may be added that Russell‖ lately, in a very interesting paper, described the relation of angina pectoris to reflex action of abdominal origin. Vasomotor, neurasthenic, and hysterical causes are much less common, excepting in association with structural alterations, with which they are sometimes conjoined. It is not possible to leave this subject without referring to the views of Clifford Allbutt,¶ who believes that the essence of angina pectoris is to be found solely in aortic lesions. This is to my mind too narrow a conception of the state of matters. Lastly, let me add that the blood pressure may be high, as originally proved by Brunton,** or low, as was first demonstrated by Morison,†† but in the largest proportion of cases the pressure is high in relation to the strength of the heart.

Passing by all questions of diagnosis as well as of prognosis, let me say a few words as regards the treatment of angina pectoris. The first point, which will always demand consideration, is whether there are many underlying conditions inducing or influencing the symptoms. In particular it is always advisable to investigate the condition of the abdominal viscera, seeing that catarrh of the mucous membrane and distension of the visceral walls are so often the reflex causes of attacks, while dilatation of the stomach and intestines is sometimes also a direct mechanical source of disturbance. Similarly when the pulmonary circulation is interfered with, so as to increase the stress upon the right side of the heart, there are apt to be some distressing results. On the other hand any diminution of excretion, by skin or kidney, leads to troubles for the left side of the heart, through increase of blood pressure. Each and all of these possible factors must be thoroughly investigated. Again, the amount of exertion, physical and mental, should be carefully estimated. All deviations from healthy conditions must be obviated or relieved according to circumstances, both as regards immediate results and further contingencies.

Our first duty, when called to see anyone suffering from a paroxysm of angina pectoris, is to relieve it with as little delay as possible. Seeing that in the majority of cases the condition is associated with at least a relative high arterial pressure, drugs which lessen the resistance are of great importance. The most useful of these are the nitrites and the iodides. The nitrites of amyl and butyl—more exactly isoamyl and isobutyl—have long had a well merited vogue for relieving the symptoms. Amyl nitrite is pre-eminently useful, and, when administered in a dose sufficient to produce well marked physiological effects, it cannot be surpassed. Butyl nitrite, although of more recent introduction, and therefore of less assured utility, appears to produce very beneficial effects also. Both may be administered in doses of from three to five minims, the most convenient means of administration being glass capsules. It is difficult, if not impossible, to decide a priori the relative utility of these drugs. Their effects are undoubtedly dependent to a great extent upon personal idiosyncrasies.

Ethyl iodide, otherwise known as hydriodic ether, is also of considerable value, administered by inhalation in doses of five minims; glass capsules containing this dose may be employed. So far as can be ascertained, the action of this drug is due to the liberation of free iodine, which is rapidly absorbed by the blood. It is impossible to foretell in any given case whether the nitrite or iodide series will be most useful and the value of these drugs can only be judged by their results. It is unfortunate that all of them frequently leave headache and giddiness behind them. A very serviceable combination is supplied in capsules of ethyl iodide and chloroform, each containing five and ten minims respectively of the two drugs. The chloroform has certainly, in my own experience, lessened the discomfort produced by hydriodic ether.

The exhibition of powerful alcoholic stimulants by the mouth is often urgently called for; brandy, whisky, spirit of ether, spirit of chloroform, and aromatic spirit of ammonia are all eminently useful in this connection. It may even be necessary to give the patient such general anæsthetics as chloroform

* Diseases of the Heart, 1809, p. 138.
† Arch. gen. de med., 1863, pp. 428, 561, and 696.
‡ Wurz. med. Zeitschr., 1863, s. 249.
§ Brit. med. Journal, 1905, Vol. II., p. 847.
‖ Brit. med. Journal, 1906, Vol. I.
¶ The Cavendish Lecture, London, 1903, p. 17
** Lancet, 1867, Vol. II., p. 97.
†† Edin. Hosp. Report, 1895, Vol. III., p. 250.

or ether by inhalation. Sometimes the subcutaneous administration of morphine is absolutely necessary. The application of heat to the chest externally is often useful and respiratory movements certainly alleviate the suffering in many cases. It need hardly be added that the patient must be placed in such a position as will be most easy and comfortable, while an abundant supply of fresh air must be secured. If the sufferer can be induced to inspire deeply, he will often obtain relief.

When we consider preventive treatment, we find it necessary to lay down full directions regarding the general measures to be followed. The diet must be so regulated as to prevent any digestive embarrassment, particularly flatulant distension; the fluid must be ample, so as to ensure proper metabolic changes, but it should not be given with meals; sufficient exercise must be enjoined, so as to stimulate not only the muscles but every other part of the body; adequate rest should be secured, so as to provide for recuperation; occupation must be provided, in order to prevent the mind lingering upon the distressing symptoms of the affection; sleep enough to provide for complete restitution of every system will have to be ensured—these general measures will require full attention, and many little details, which cannot be mentioned here, will demand sedulous care.

Respiratory movements cannot be over-estimated; their value for those able to take advantage of them is very great. In certain cases, however, when the patient is unable to take active exercise, massage must be adopted. With regard to such matters you will allow me to express my own conviction that the Swedish system of massage and exercises is very much more useful than any other method.

In dealing with the medicinal treatment of angina pectoris, it has to be remembered that, with a complex causation, there must be considerable difference in management. As regards organic types of the affection, it may be necessary to use remedies which will modify metabolism, and act as alteratives; amongst such drugs there are none to compare with the iodides. Undoubtedly the efficacy of these drugs is entirely due to their power of removing morbid products. Iodide of potassium and iodide of sodium are the most useful of these remedies, and one or other may be combined with arsenic, both to prevent the tendency to iodism, and to obtain the specific influence of arsenic itself. If these iodides cannot be tolerated, as occasionally occurs, hydriodic acid, in the form of the syrup, may be administered.

If the pulse pressure has a tendency to be relatively too high one of the vaso-dilators should be administered; nitroglycerin is the most valuable of all these. It may be given in a dose of from 1/200 to 1/50 gr. The 1 per cent. alcoholic solution and the tablets afford easy methods of administration. The drug, if necessary, may be given hypodermically; the preparation most commonly used being 25 minims of the trinitrin solution, with 10 minims of 90 per cent. alcohol, and 25 minims of distilled water; of this from 1 to 4 minims may be administered hypodermically for a dose.

Erythrol tetranitrate, or tetranitrin, is often used in doses of from ½ to 2 grs., while manitol pentanitrate, or pentanitrin, and mannitol hexanitrate, or hexanitrin, have been used in recent years, in the same doses as we use in the case of nitroglycerin they are, however, not to be compared with it.

In all cases where the heart shows any tendency to falter, or in which it is relatively weak compared with the pressure it has to overcome, the management will necessarily be to all intents and purposes that of cardiac failure; sufficient rest with graduated exercises and such cardiac tonics as strophanthus with nux vomica are to be recommended. In the toxic cases of cardiac pain, the elimination of the poison, the restoration of the cardiac energy and the recovery of the nervous system are the points to be borne in mind. In the case of chemical poisoning, whether due to alcohol, tobacco, or tea, further enjoyment of the poison must be prevented. In such cases a considerable lapse of time is necessary, and continued rest with massage, succeeded by respiratory exercises, and followed by graduated exertion will be necessary.

Practically the same line of treatment is necessary in gouty conditions, but the specific for such states is colchicum, which, along with alkalis, will speedily bring about improvement. In instances of influenzic or diphtheritic angina, the best treatment undoubtedly is the same as has been suggested for the chemical poisons. In some cases the use of appropriate baths is indicated; along with such means the employment of strychnine promises the best results.

In order to remove reflex angina pectoris, the cause of the disturbance must be ascertained, while at the same time the bromides or hydrobromic acid will lessen reflex irritation. The vasomotor type of the affection is best treated by means of the nitrites, but thyroid extract has, in my hands, produced considerable improvement in cases manifesting symptoms like those of Raynaud's disease.

Lastly, the neurasthenic and hysterical varieties must be dealt with as part of the general conditions in which the symptoms arise, and the modern treatment of such conditions produces, as a general rule, most satisfactory results.—THE PRACTITIONER.

THE TREATMENT OF TRACHOMA.*

BY C A. VEASEY, A. M., M D,

So many pupils of the public schools of many of our large cities during the past few years having been found to be affected with trachoma, and so many areas of infection being known to exist in our large centers of population, it may not be amiss to discuss before this society the most satisfactory methods for treating the disease, inasmuch as a large proportion of such patients first come under the observation of the family physician.

It is not within the province of this paper to discuss the symptomatology or diagnosis of the affection. Suffice it to say that it must not be mistaken for vernal conjunctivitis, a disease which is being observed more frequently at the present time than in former years, and which occasionally resembles in some respects the condition of trachoma.

If we have a case of trachoma of comparatively recent origin which has not reached the stage in which the various distortions of the lids with the accompanying corneal changes are found, there are three chief conditions to be met. We must remove all excessive secretion, a condition eminently adapted to the growth of pathogenic microorganisms: we must remove the trachoma granules with as little damage as possible to the conjunctiva, thus preventing to a certain extent the third condition, or subsequent distortion of the lid, with the accompanying corneal changes. For the first purpose, notwithstanding the many recent adverse reports concerning the action of the drug, my best and most rapid results have been obtained with argyrol. The patient is instructed to irrigate thoroughly the conjunctival cul-de-sac with a physiologic saline or boric acid solution every two, three, or four hours, according to the character and amount of secretion, and immediately thereafter to instil a drop of a 25-per-cent solution of argyrol. The argyrol solution should be freshly prepared from the crystals at least every ten days, and should never be employed after it has become inky-black rather than brownish in color. My patients have employed solutions as strong as 50 per cent, though the 25-per-cent solution seems to answer the purpose just as well, and I have never seen any ill result follow its use. In my experience it is seldom necessary to employ anything more to rid the conjunctiva of excessive secretion; but in a small number of cases in which the secretions have been present for a long time and in which the lacrimal drainage is bad and the conjunctiva soft and macerated, an astringent is required in addition to the treatment described above. In this class of patients topical applications of weak solutions of silver nitrate, zinc sulphate, or the alum crayon should be made once a day to the everted conjunctiva. These will usually produce the desired result. In a few patients it may be necessary, however, to slit the lower canaliculus of each eye in order to effect better drainage.

To remove the trachoma granules with as little destruction and subsequent distortion of the conjunctiva as possible, in my experience no method equals that of expression. It matters not whether they are expressed individually by means of small forceps devised for the purpose (and this is the better plan if they are few in number), or whether they are expressed in groups by some of the larger forceps, such as Knapp's or Claiborne's roller forceps. Personally, I prefer Claiborne's instrument because the spicules on the rollers penetrate each granule, thus permitting the contents to be more easily and more thoroughly expressed. The important point is to express the contents of all the granules, and unless one is careful a few in the retrotarsal folds or at the angles of the eye will be missed. If the trachoma granules are few in number, local anesthesia is sufficient; if, however, they are numerous, a much more efficient operation can be performed with the patient under the influence of a general anesthetic. It is my custom just before expessing the contents of the granules, if they are numerous, to make superficial scarifications of the conjunctiva, and immediately after the expression to rub into it thoroughly, by means of a pledget of absorbent cotton on the end of a wooden applicator, a solution of mercuric chloride 1 to 500, or a solution of copper sulphate grs. xl to ℥j. If the scarification of the conjunctiva has been extensive, a bichloride ointment is incorporated and cold compresses employed for a couple of days; otherwise only cleansing lotions are necessary.

The subsequent treatment after the subsidence of the acute inflammation produced by the expression consists in topical applications to the everted conjunctiva by the surgeon and in instillations by the patient. The crayon of copper sulphate in those cases that can tolerate it (in my experience comparatively few), solutions of copper sulphate gr. x-lx to ℥j, boroglyceride 30 to 50 per cent, and tannin and glycerin grs. xx-lx to ℥j, are applied at first once a day, and as improvement is noted the time between the applications is lengthened. Sometimes a patient will cease to improve under one of these medicaments, and another must be substituted. The patient may himself instil three or four times a day a drop of glycerin and tannin gr. x to ℥j, or boroglyceride 10 per cent; or sulphate of copper may be employed according to the method of A. E. Prince, of Springfield, Illinois. It is his custom to

* Read before the Philadelphia County Medical Society, Nov. 13, 1907.

give to each patient a two-drachm vial of a 10 per-cent solution of sulphate of copper in glycerin with the following directions: "Dilute one drop in twenty drops of water. Use freely in eyes four times a day. Increase strength; make fresh each time." In his experience it is best to commence with one drop of this solution in twenty drops of water and to use it from four to six times a day. The patient is told to decrease the water as he finds he can tolerate the solution, or to increase the water if the solution proves too irritating. Some patients do not tolerate the treatment very well but in most patients, in his opinion, it is satisfactory and seems to have effected permanent cures.

After repeated trials of the various medicament that have from time to time been recommended to be used as topical applications in the treatment of trachoma, I have always been obliged to return to the employment of the remedies just described as those affording the most satisfactory results. Many trachomatous patients, unfortunately, discontinue treatment as soon as the subjective symptoms have been relieved, and for this reason never receive any permanent benefit. It is most important that the treatment be persisted in for a long time if there is any expectation of effecting a cure.

The Roentgen rays have been tried on a few patients, but my experience with them has not been satisfactory. Solutions of jequirity in gradually increasing strengths have not been employed by me personally, but a number of patients under my care who afterward had this method employed by competent surgeons did not seem to me, when after some months they came under my observation again, to be in any better condition than those treated by the methods to which I have referred.

If the disease unfortunately has passed into that stage in which deformity of the lids and accompanying corneal conditions appear, suitable operative measures for the former and local treatment for the latter are of course required. Under these circumstances it may sometimes be necessary to perform canthotomy, canthoplasty, or some one of the various operations for ectropion, in order to relieve the cornea from mechanical pressure, and the treatment for the various corneal complications does not differ materially from the treatment of similar conditions produced by other causes than trachoma.

Personal care and cleanliness to protect others, isolation for those patients unable or unwilling to take all proper precautions sanitary surroundings and mode of living, the internal administration of suitable reconstructive and supporting tonics, an abundance of fresh air, sunshine, and nutritious food, all have their places as adjuvants in the management of this troublesome affection.

I cannot refrain from here entering my protest against the United States government for excluding all trachomatous individuals regardless of circumstances. It is generally conceded, I believe, that the disease is contagious through its secretion, and that in the third or cicatricial stage the characteristic secretion has disappeared. If individuals therefore, affected with trachoma in this stage and fully competent financially to take care of themselves apply for admission into this country, it seems to me to be very unjust that they should be denied admission and be deported. And yet such is the law. In addition to this, who of us can say positively upon eversion of the lids and the most careful examination of a case of non-active cicatricial trachoma, in which not a symptom or condition can be observed except the conjunctival cicatrices of the old inflammation, whether or not he is confronted with a cured case, or a case that may some time in the future give rise to further trouble?

I have observed for many years two patients who in early life were infected with trachoma—one twenty years ago, the other sixteen years ago. Both were treated by competent surgeons, and both recovered without any involvement of the cornea. To the casual observer the eyes are normal. When the lids are everted the cicatrices of the former inflammation are noted everywhere. They are cured cases and simply show the results of the former inflammatory process. There have been no symptoms referable to the lid conditions for years, yet I am sure that any of us examining those conjunctivæ for the first time would suspect that the patients were in a quiescent period of the cicatrical stage of trachoma, and that an examination by our Public Health and Marine Hospital Service would result in similar patients being deported. Until we are able to state positively from a brief inspection whether a given condition of cicatricial conjunctival membrane is a cured case of trachoma or simply a case in the third stage from which more active symptoms may be expected later, the line of exclusion should not be so closely drawn.

Some months ago the following incident came under my observation: About six years ago a native of Syria came to this country, went to a small town in Ohio, successfully engaged in business, acquired property, and become a naturalized citizen of these United States of America. He sent for his family, consisting of a wife and two children, to join him, but for family reasons the children were left behind with the old folks in Syria when the wife and mother came to this country. Within the past two years these two children, a boy and a girl about ten and twelve years of age, bright, cheerful, and apparently healthy, traveled all the way down the Mediterranean to Maresilles, across France and across the English

channel up to Liverpool, thence across the Atlantic to Philadelphia, where they were met by the father and mother, who had come on from Ohio—a trip consuming the better part of two months—to be ordered deported because on the upper lid of one there were two trachoma granules and on the upper lid of the other three trachoma granules, recently developed, and undoubtedly contracted by infection during the long voyage. The father, a citizen of these United States, was able and willing to obtain for these children competent surgical attention, and aside from sentimental reasons and the hardship of the separation of the children and parents it does not seem to me that it should be mandatory to exclude such cases. The stage of the disease, the financial condition of the patient or the patient's relatives, the prospect of the patient never becoming a public burden, in my opinion should all be considerad in interpreting the law.—THE THERAPEUTIC GAZETTE.

TETANUS.*

BY E. J. MOSELEY, JR., M D.

I realize my incompetency to handle the extensive subject of Tetanus. The disease was known to the early Greeks, they naming it a stretch affection, the word tetanus being taken from teino, I stretch. Since these early days it has been a source of dread to medical men. Napoleon's troops in Egypt suffered greatly from its ravages, as did also the English and Saxon armies in the wars of 1763 and 1798. Frequent epidemics have been known in various hospitals in London and Dublin (chiefly in the latter instances, cases of tetanus neonatorum).

To Rattoni, Carle, Nicolaier, Rosenbach, Kitasato, Tizzoni and Cantani are attributed the honors of isolating and cultivating the bacillus. In recent years a great many investigations have been made with, to my mind, very little progress towards the successful treatment of the disease. There is no drug, nor serum, nor other procedure, whether surgical or otherwise, which will successfully and completely allay the intense reflex excitability of the nervous centers, and which will destroy the toxines of the tetanic germ.

As to the bacillus. We have seen that the bacillus tetani is anærobic, motile, a short rod with bulbous or flagellated extremity, its other end being slightly pointed. Its sporules are difficult to destroy and produce virulent toxines. These toxines can easily be discovered for experimental purposes, mixed with the serum exuding from the wounds infected by the bacillus. The germ itself has been frequently found on the object producing the wound—on wooden splinters removed from the wounds, on jagged or sharp instruments, such as pitchforks or rusted nails and about dusty machinery. It is highly probable that in cases in which this disease occurs, such as in barefooted children, in poorly-clad people, or where surfaces are exposed in their various avocations (especially in slovenly or ill-kept people) that the germ is present on the surface perhaps in numbers, and carried in by whatever instrument, may perhaps cause the wound. Being once introduced, with a suitable nidus, warmth, blood serum and the absence of air, it becomes active and propagation and sporulation commence with the formation of its poisons toxines. By absorption and osmosis this is taken up by the capillary circulation, affecting particularly the spinal centers.

The size of the wound seems to have no bearing upon the severity of the disease, apparently insignificant ones resulting equally as disastrously as graver injuries, the milder ones resulting perhaps more disastrously than the deeper lesions. Punctured, contused, lacerated, and gun or pistol shot wounds are oftenest the kinds affected.

The beginning of the disease occurs in from nine to twelve days after the original injury, first displayed by the slightest irritability on the part of the patient; this increases synchronously with a slight tardiness in the muscular movement of the pharyngeal constrictors and of the masseters, slight uneasiness on the part of the patient, accompanied by an inability to open his mouth properly. Rarely, the symptoms begin by slight rigidity of the muscles nearest the point of infection, but more frequently as above stated, in the constrictors and in the masseters—the spasm of the latter causing firm pressure of the lower maxilla against the upper, giving rise to the name of lock-jaw. The muscles of the face generally enter into the contraction, causing the characteristic sardonic grin. This is made more evident by asking the patient to show his tongue; the contraction extends downwards, principally to the muscles of the back, thorax, abdomen and the diaphragm; the muscles of the extremities are least affected; the peculiar wearied strain on the muscular fibres is severe at times. The contractions of the posterior muscles are affected, causing arching of the spine and opisthotonos, and if the muscles are laterally affected, the name pleurosthotonos is given. Chill or chilly sensations, accompanied by the rise of temperature 102° or even 107° occur; rigors, highly increased sensibility; exaggerated reflexes, with the above spasmodic contractions, mental faculties remaining clear, pulse rate high and often variable, respiration quick and spasmodic, ending in death from spasm of the diaphragm generally, or from a septic effect produced upon the myocardium.

* Read before the Richmond Academy of Medicine and Surgery, 1905.

The characteristics of the convulsive seizures are marked and peculiar to this disease alone. In one instance we have known a case in which the severe spasms could be produced by merely allowing a draft from an adjacent door to blow upon the patient, This was tested everal times. Slight jarring of the bed or foot fall on the floor has produced them in the severest cases. We have referred above to idiopathic or cryptogenic and traumatic tetanus.

A word as regards tetanus or trismus neonatorum and what is known as puerpural tetanus.

Tetanus neonatorum occurs, as the name implies, in the new-born from infection through the cord by dirty hands, instruments, gauzes or application made by midwives. The characteristic symptoms are generally lacking, other than the contraction of the jaw muscles (which is first shown by an inability to nurse), icterus, the later convulsive seizures of a much milder degree than in the adult, the infant dying oftener in a comatose condition than with convulsion.

Puerperal tetanus usually occurs after the ordinary incubative period, after labor. The mode of infection is undoubtedly by dirty hands, unclean parts, or perhaps syringe tips which may have been used. What better focus for growth and propagation could be found than the gravid uterus?

Fortunately in these days of asepsis but few cases of the latter two classes arise, and the only ones I have seen have been the results of deliveries after dirty midwives, or when there has been no attendant at time of labor.

Pseudo-Tetanus. I do not believe that after extensive infection of the blood system has taken place any treatment will avail; all cases of true tetanus are fatal.

The cases enumerated, with few exceptions, which have recovered, were pseudo tetanus. We have often seen cases with the history of injury developing at a stated period, symptoms simulating tetanus which pass off after a few days. Dr. Robert Bryan has reported a case of a servant girl whose foot was injured by a rusty nail, she developing typical symptoms two or three days later, with an apparently festered wound, locked jaws, and typical opisthotonos. She was easily brought out of the condition in which she had lain for a day or two, and which proved to be hysterical, by his dashing a bucket of cold water over her head, neck and chest. Strychnia, nux vomica and other of the poisons classified as tetanics, or spinal neurotics by the toxicologists, are in such common use, and hysteria is so prevalent, we can see how readily even shrewd diagnosticians may be fooled. The belief expressed by authorities is, that the disease is at present incurable. The chief factor lies in its prevention. There is perhaps too great a tendency in these days, to save an injured member, and in some instances where severe laceration has taken place as in crushing, the parts should be forthwith amputated with aseptic precaution. Better be minus a member, finger or toe than with the inconvenience of a protracted convalescence with deformity, and perhaps extensive suppuration, tetanus or erysipelas.

When amputation is inadvisable the parts should be freely incised and the blood flow staunched, and if possible laid open to the air and sunlight, for the latter are immediately destructive to the propagation of the bacilli.

The best local application is a continuous irrigation with sol. of tannate of potassium. Carbolic acid, mercuric bichloride, etc, are in constant use, but perhaps not so good.

Chambisse and Vidal claim that light delays sporulation. X-ray and Finsen-ray have been suggested to be used directly upon the seat of the injury. We do not believe that the serum manufactured by the local houses will cure the disease after a case has once developed. From results obtained it would seem a waste of time and expense to use the serum, except as an immunizer, as manufactured at this date. The dose is larger even as an immunizer, for which purpose alone its value is proclaimed, the best authorities believing that it does good only as such, from a few to 300 c.c. being the dosage.

It protects only against the tetanus toxins, or toxic ptomaines, which were named by Brieger tetanin, tetatoxin, diamine and spasmotoxin. However, as our means are limited for the relief of the disease, we needs must have something to fall back on. It may be injected subcutaneously or intravenously, and in urgent cases directly into the brain or by means of a lumbar puncture subdurally—small doses at first, then larger. As a routine procedure it is well to inject from 10 to 20 c c. into loose cellular tissue of the back or abdomen and repeat two or three times a day. In severe cases lumbar puncture may be done between third and fourth lumbar vertebræ, and after allowing 10 to 15 c. c. of cerebro-spinal fluid to escape inject a like amount of the serum. It is, however, of the greatest importance to inject as soon as the disease is suspected.

If we accept the theory of the transmission of the toxines along the motor nerves to the spinal cord as the true one, it would naturally follow that an injection of serum directly into the membranes of the cord, at the same time slightly abrading the nervous tissue, would be apt to be followed by more rapid results, in that the serum would more rapidly come into contact with the toxines affecting the anterior-horn cells. It has, furthermore, been demonstrated, with a certain degree of

certainty, that the toxines cannot travel in a peripheral direction along the motor nerves, and that it takes several days for them to travel from the end of a nerve to its origin; also that antitoxin pursues exactly the same course. Accepting these theories, Rogers has advocated a combined intraneural and intraspinal injection of serum, a procedure which he has carried out successfully, he says, in two cases. In the first case, in which tetanus followed an injury to the hand, he injected into each one of the nerves of the left brachial plexus, five to ten minims of antitoxin. In addition to this sixty minims were injected into the spinal cord. This was repeated the following day. In his second, following an injury to the foot, he exposed the anterior crural and sciatic nerves on the right side and injected into each half drachm of antitoxin, combined with a spinal injection of a drachm and a half of serum. The spinal injection was repeated on three successive days. Both patients are said to have recovered.

Injections of carbolic acid have been used. Kocher recommends subcutaneous injections of min. xv of a 3 per cent. solution, every one or two hours. Bacelli was the first to have noticed that injections of carbolic acid were followed by a marked diminution of the reflex excitability of the nervous system, which he ascribed to certain general antiseptic properties of the drug. Symptoms of poisoning have never been observed in these cases.

The best medical treatment is perhaps the old chloral-bromide—administered per rectum in large doses until the patient is fully under their influence. These will do about as much to allay the painful spasms as anything. Morphin, or even chloroform, may be given—the latter temporarily for the severe convulsive seizures; amyl-nitrate by inhalation when spasm of the glottis occurs. Eserin or physostigmine may be given by mouth or hypodermically. This drug is exactly opposed physiclog'cally to the effect of the toxins, has been much vaunted, but its clinical value has yet to be demonstrated. I believe I have seen injections of 1-100 gr. hypodermically, do good, however, repeated until the physiological effect is shown. Cannabis indica is also recommended.

Nourishment must be gotten in by the stomach or per rectum. In cases where the spasm of the masseters is great nasal feeding must be resorted to. A medium catheter can be passed through a nostril and down the œsophagus, and broths, peptinoids, or concentrated meat juices introduced. If perhaps there may be the absence of a tooth (or one may be removed in not too prominent position), the catheter or silver tube may be introduced at intervals through the opening. Brandy may be given and is the best stimulant to use. The hot pack is of undoubted value as a relaxant.

Venesection is resorted to, blood removed in quantities of a pint, and decinormal saline intro-quickly.

Absolutely every unnecessary disturbance by touch or sound should be avoidad.

In patients dying from tetanus rigor mortis comes on very rapidly, even before the body has cooled and passes off frequently very quickly.

A word about the development of tetanus from the recent toy pistol wound. It has been noted that hot weather, mixed infection and burns, with the anaerobic conditions, favor the development of the disease; thus the fatality of "Fourth of July" injuries. The powder, wadding, etc., are projected into the tissue deeply, often becoming so buried in the tissues that air is excluded. Local destruction of tissue takes place and hæmatoma are formed. There seems to be greater danger from blank than frem ball cartridges. Dr. Conolly, of Newark, recently found tetanus germs in these cartridges. The New York Board of Health recently had investigations made to ascertain the source of infection in these cases, with the result that the probability was that the bacilli were present on the skin in numbers and carried in by the missile, and not present, as a general rule, in the cartridges themselves. More than half of the deaths from tetanus in the United States are said to be results of such accidents. Fortunately, recent legislation may prevent this high mortality rate in future.—THE VIRGINIA MEDICAL SEMI-MONTHLY.

THE SURGICAL TREATMENT OF COMPLETE DESCENT OF THE UTERUS.

BY E. C. DUDLEY, M.D., CHICAGO.

Complete descent of the uterus, descent to the third degree, which may be defined as that deviation in which a part or the whole of the uterus is outside of the vulva, is always associated with extensive injury to the pelvic fascia, the pelvic connective tissue, the muscles of the vaginal outlet, the perineum and the vaginal walls; in fact, these injuries of the pelvic floor constitute the essential lesion, the mal-location of the uterus being an incidental factor.

The uterus in its normal position lies across the pelvis, the fundus pointing in a slightly upward anterior direction, and the external is in a slightly downward posterior direction. The long axis of the uterus in this normal direction makes an acute angle with the long axis of the vagina, which extends from the vulva upwards and backwards in the direction of the

hollow of the sacrum. Generally speaking, mobile anteversion with some degree of anteflexion is the normal position of the uterus; at any rate, the uterus in its normal range of movements does not deviate, unless temporarily, beyond the limits of a certain normal anteversion and anteflexion.

In the etiology and treatment of descent the practical significance of this acute angle between the axis of the uterus and vagina is very great, because the uterus in the act of prolapse must descend through the vaginal canal in the direction of that canal, that is, a coincidence of the two axes is a pre-requisite of descent. Now, if the essential condition of descent is a coinc idence of the axes, it follows that one factor at least, in the treatment of descent must be to restore the normal angle between the axes.

In labor the anterior wall of the vagina is depressed, stretched and shortened by the advancing child that during and after the second stage the anterior lip of the cervix uteri may be seen behind the urethra. This location of the cervix—so close to the anterior wall of the pelvis—necessarily involves great stretching of the utero-sacral supports which normally hold the cervix uteri, and together with it the upper extremity of the vagina close to the hollow of the sacrum. This function of the post-uterine ligaments having been temporarily impaired, the upper extremity of the vagina is displaced forward, so that the uterus, having sufficient space between itself and the sacrum, instead of maintaining its normal anterior position, may fall backward into retroversion and thereby bring its own axis into line with the direction of the vagina. Frequently the change in the direction of the vagina from the normal oblique to the abnormal vertical is still further increased by injury to the vaginal outlet; the perineum may be torn in any direction, and what is more serious, it may be torn away from its pubic attachments and in this way may be displaced backwards towards the tip of the coccyx; in fact, such displacement is so common, as the result of injuries to the perineum, as to suggest the propriety of a change in terminology from laceration to displacement of the perineum. The upper extremity of the vagina being displaced forward and the lower extremity backward, and the direction of the over-stretched, dilated vagina now being vertical, the heavy uterus, having its long axis in the same vertical direction, has all the conditions favorable to progressive descent.

If the puerperium progress favorably with prompt involution of the pelvic organs, and if the relaxed vesico vaginal wall and other parts of the pelvic floor, especially the utero-sacral supports and the broad and round ligaments, recover their normal tone, then the whole pelvic floor, including the uterus, resumes its normal relations. But if the enlarged heavy uterus remain in the long axis of the vagina, and especially if the fundus uteri be incarcerated under the promontory of the sacrum with the sacral supports stretched so much and for so long a time that they cannot recover their contractile power; and if normal involution of the pelvic organs be arrested then descent may not only persist, but may progress with constantly increasing cystocele and rectocele until the entire uterus has extruded through the vulva.

It is most impotant to remember that complete prolapse of the uterus is only an incident to prolapse of the pelvic floor. The whole mechanism is that of hernia, and the condition is hernia, for the extruded hernial mass drags after it a peritoneal sac which, hernia-like, contains small intestines. This sac forces its way to the pelvic outlet and extrudes through the vulva, having the inverted vagina for a covering.

The prolapsing uterus may be related to the vaginal walls in either one of two ways: the prolapsing vaginal walls may drag the uterus down after it, or the uterus itself may descend along the vaginal canal by force of its own weight and drag with it the reduplicated vaginal walls. Extreme prolapse of the uterus, the organ being covered thus by reflected vaginal walls, has given rise to considerable confusion in pathology, and by many standard authors wrongly has been called hypertrophic elongation of the cervix uteri. In a given case, the possibility of intra-vaginal elongation may be settled easily by placing the patient in the knee-breast position, when the uterus of its own weight will fall toward the diaphragm and the reduplicated vaginal walls will unfold and utero-vaginal attachment will appear in the normal place instead of being, as it seemed to be, high up on the walls of the uterus. Those cases in which reduplication of the vaginal walls does not almost entirely explain apparent great elongation of the cervix, are rare exceptions. When formerly these mechanical conditions were attributed to hypertrophic enlargement of the uterus itself, and were regarded as adequate indications for the removal of the cervix, the surgeon, in the attempt to remove what he supposed was the elongated cervix uteri, sometimes invaded the bladder anteriorly and the rectus posteriorly.

Surgical Treatment.—In passing, it may be well to mention, for the purpose of condemning it, an operation perhaps more frequently performed than any other for the cure of complete descent, namely, the operation which generally passes under the name of Stolts. This operation is designed to narrow the vagina, and thus to maintain the uterus somewhere in the pelvis above the constriction. Operations of this class usually consist of the removal of an elliptical piece from the

anterior or posterior vaginal wall, or from both, and of closing the exposed surfaces by means of a purse-string suture. No effort is made to destroy the normal axis of the uterus and vagina. The whole purpose is to make the vagina so narrow that the uterus cannot pass through it. Such operations generally fail, because they leave the uterus and vagina in the same axis, and because the restricted vagina cannot resist the downward force of the uterus, which almost invariably dilates the vagina a second time and forces its way through with reproduction of the hernia. Moreover, the operation always does permanent harm, because it shortens the vagina, thereby making it draw the cervix away from the sacrum towards the pubes, so that the body of the uterus may have room to fall backward to the position of incurable retroversion. We may, without discussion, perhaps, throw out all operations belonging to the Stoltz group. The same may be said of all plastic operations in which the vaginal surfaces are exposed by superficial denudation and brought together by sutures.

After a prolonged trial of the principal surgical procedures which have been made use of for the cure of complete descent, I am prepared to lay down certain essential principles, as follows: An efficient operation on the vaginal walls should have for its object, not narrowing the vagina, but restoring the normal direction of it with a double purpose, so that (a) the upper extremity, together with the cervix uteri, shall be in its normal location within an inch of the second and third sacral vertebras, just where the utero-sacral ligaments would hold it if their normal tonicity and integrity could be restored, and so that (b) the lower extremity of the vagina shall be brought forward against the pubes. The fulfilment of these two indications will restore the normal obliquity of the vagina and will hold the cervix uteri so far back toward the sacrum that the corpus uteri must be directed forward in its normal anterior position of mobile equilibrium. With these conditions, the uterus being at an acute angle with the vagina and having little space posteriorly, cannot retrovert and turn the necessary corner which would permit it to prolapse in the direction of the vaginal outlet. In order to accomplish this, two things usually are necessary:

1. Excision of the Cystocele.

Anterior Colporrhaphy.—The plastic operations performed on the anterior and lateral walls of the vagina by Sims, Emmet, myself and others, which have consisted of superficial denudation and reefing of the anterior or lateral walls of the vagina, have been only partially successful, first, because they did not adequately force the cervix uteri into the hollow of the sacrum; second, because efficiency requires deeper work than superficial denudation can accomplish, and third, because these operations did not utilize the broad ligaments sufficiently for support.

The above principles, emphasized by Reynolds in a recent paper, have led me to modify my own operation materially. Complete prolapse, being hernia, should be treated according to the established principles of herniotomy by reducing it and then excising the sac in such a way as to expose strong fascial edges, which should be firmly united by sutures. The absurdity of treating any other hernia by superficial denudation and reefing or tucking in the surfaces by sewing them together must be apparent to any one. In order to indicate the part which the broad ligaments must have in a correct operation, it is only necessary to observe the fact that vaginal hysterectomy commonly results in holding up the pelvic floor and with it the rectum, vagina and bladder, because in this operation the broad ligaments are usually fixed to the vaginal wound. But why should not the same result be aimed at by similar means, even though the uterus is not removed? The operation which I would urge is performed as follows:

First Step.—To split the antero-vaginal wall—that is, the vaginal plate of the vesico-vaginal septum—by means of scissors, from the cervix uteri to the neck of the bladder, then to strip off the vaginal from the vesical layer of the vesico-vaginal wall and cut away the redundant part of the vaginal plate.

Second Step.—The redundant part of the vaginal wall having been removed to extend the incisions and remove the mucous and submucous structures to either side of the uterus, being sure to reach the fascial structures, which are in direct connection with the lower margins of the broad ligaments, or, what is better, to reach the ligaments themselves.

Third Step.—To introduce silk worm gut or chronic catgut sutures so that when tied they will draw the loose vaginal tissues and the broad ligament structures on either side of the cervix uteri in front of the cervix so as to force the cervix back into the hollow of the sacrum.

Fourth Step.—The sutures introduced in the third step having been tied, additional interrupted sutures are introduced to unite the vaginal wound from side to side; this suturing is continued to a point near the urethra, when most of the redundant vaginal wall will have been taken up; there will usually remain, however, the lower portion of the cystocele and perhaps some urethrocele, which cannot be disposed of by bringing the margins of the wound from side to side, but can be taken up by uniting the remaining part of the wound in a transverse direction.

Even at the risk of prolixity I repeat that it is essential to remove the entire thickness of the vaginal layer of the vesico-vaginal septum.

Contraindications to Elytrorrhaphy.—Elytrorrhaphy is usually unnecessary, and therefore contraindicated in descent of the first degree. The special province of the operation is in complete prolapse or procidentia when associated with cystocele. The operation further is contraindicated by tumors and adhesions which render replacement and retention impossibie, and in diseases of the uterus or its appendages, which demand their removal. When such contraindications do not exist, elytrorrhaphy and perineorrhaphy in a majority of cases are quite as effective, and therefore to be preferred to the more dangerous and mutilating operations of hysterectomy.

2. Perineorrhaphy and Posterior Colporrhaphy.

As already stated, it is most important to appreciate the fact that in nearly every case of procidentia the lower extremity of the vagina is displaced backward. This is consequent upon subinvolution of the pelvic floor, and especially upon sub-involution or rupture of the perineum or of some other portion of the vaginal outlet. Unless, therefore, the posterior wall of the vagina and the perineum can be brought forward to their normal location under the pubes, so as to give support to the anterior vaginal wall, the latter will fall again, will drag the uterus after it, and the hernial protrusion (cystocele and prolapse) will be reproduced. The treatment, therefore, of procidentia must always include an adequate operation on the perineum, or, more comprehensively speaking, upon the posterior wall of the vaginal outlet. The operation must be performed so that it will carry the lower extremity of the vagina forward to the normal location close under the pubes; then, if the anterior colporrhaphy has been adequate, and has carried the upper extremity backward, the whole vagina will have its normal oblique direction, and its long axis will make the necessary acute angle to the long axis of the uterus.

Hysterectomy, if indicated, should be performed by the vaginal route. As an operation for procidentia, hysterectomy is open to the following comments: Procidentia, as already shown, is hernial descent, not merely of the uterus, but also of the vagina, bladder and rectum. Complete prolapse often occurs after the menopause, when the uterus has become an insignificant rudimentary organ, and therefore may be removed easily. Cases are numerous in which, after vaginal hysterectomy, the pelvic floor, and with it the vaginal walls, have protruded again through the vulva—a result which may be expected unless the operation has included anchorage of the upper end of the vagina to its normal location by stitching the severed ends of the broad ligaments into the wound made by removal of the uterus. The indications for perineorrhaphy as a supplement to hysterectomy are the same as after anterior elytrorrhaphy.

As laid down in the foregoing paragraphs, the utilization of the broad ligaments is the essential factor in the treatment of complete procidentia. The operation of elytrorrhaphy, above described, unfortunately either may fail to bring the lower edges of the broad ligaments sufficiently in front of the uterus to enable them to hold up the uterus and vagina, or the ligaments having been stitched in front, the stitches may not hold. Consequently, in complete procidentia, elytrorrhaphy, even though well performed, may fail; at least, this has been my experience in a number of cases. Therefore, the completely prolapsed uterus may have to be removed in order to secure the entire outer ends of the broad ligaments to the upper part of the vagina, and thereby give absolute support. As before stated, the operation should include the treatment of hernial factor in the lesion, that is, removal of the redundant portion of the anterior vaginal wall. Generally speaking, the indications are somewhat as follows:

1. Extreme cystocele, not associated with the most extreme procedentia, should be treated by anterior colporrhaphy and perineorrhaphy.

2 Cystocele associated with complete procidentia properly may be treated by hysterectomy, anterior colporrhaphy and perineorrhaphy. Anterior colporrhaphy in all cases.

3. Conditions intermediate between the two conditions indicated above, and cases of very feeble or very aged women, will call for special judgment whether hysterectomy be omitted or performed. It is, however, a fortunate fact that the completely prolapsed uterus, even in aged woman, is removed usually with ease and safety.

Other Operations of Questionable Value.—Other operations, designed to decrease the weight of the uterus by removel of it, are of questionable value. Amputation of the cervix to lighten the weight of the uterus has been practised much for the spurious hypertrophic elongation already described. Since this condition is rare, if not indeed unknown, it follows that it seldom will furnish an indication for amputation of the cervix uteri.

Alexander's operation and abdominal hysterorrhaphy belong to the surgical treatment of retroversion and retroflexion, not of procidentia. The object of these operations is to suspend the uterus form above. Hysterorrhpphy, which perhaps fulfils this indication better than shortening the round ligaments, may be indicated in cases of extreme relaxation of the

uterine supports and greatly increased weight of the uterus. The results of it in complete procidentia, however, usually will not be permanent unless it is supplemented by adequate surgery to the vagina.—CANADIAN JOURNAL OF MEDICINE AND SURGERY.

HEMORRHAGIC MALARIAL FEVER: REPORT OF CASES.

By F. A WEBB, M. D., CALVERT, ALABAMA.

As the title indicates, the purpose of this paper is to present the subject in a clinical way, giving a practical experience, rather than the natural history, ætiology and pathology of the disease.

My first experience with this fever was a personal one. After an exposure to malaria for two years in the river bottom lands of the Tombigbee river, I was attacked late one evening in October,, 1885. with a chill. Language fails to convey the feeling of prostration and aching of every part of the body I suffered from. The next morning at 8 or 9 o'clock I had my second chill, accompanied with hæmaturia. I was practically unconscious and delerious for the greater part of the time. My attending physician, Dr. Taylor, having given up all hope of my recovery, Dr. V. P. Gaines, of Mobile, was called in consultation. By heroic treatment they pulled me through. During convalescence it was urged by Dr. Patsky (a Major Surgeon in the U. S. Army), that sweet milk in twenty minim doses be given hypodermatically, every three hours, to increase the red corpuscles of the blood, as my anemia at that time was very pronounced. Only two of the milk injections were given, resulting in abscess and blood poisoning, but as one of my good friends remarked afterwards, I recovered "in spite of the doctors"

By way of comment, I would not advise or advocate the method of my scientific and learned physician in the treatment of anemia, or to increase the red corpuscles.

The second case that came under my observation was that of a young man, L. B., aged 25 years. This young man had been exposed in a logging camp known as "Bull Pen" in the river bottoms, and here he contracted malaria. He was brought to Calvert for treatment. I saw him at 3 a.m. The history given was one of malaria, and had been sick for a week. His entire body was intensely jaundiced, had been, and was still vomiting quantities of matter that resembled black vomit more than anything else, was passing bloody urine, also hemorrhage from the bowels. The vomiting was uncontrollable, also the hemorrhages, and in a few hours my patient was a dead man. This case we might well class "Malaria Hemorrhagica Fulminans." No medication seemed to have the least effect, either to relieve or stay the progress of the disease.

My third case was C. E. H., male, white, aged 30 years. This gentleman had been exposed to malaria for a period of several years in the river bottoms. In this case, prostration, nausea and hæmaturia were the most pronounced clinical symptoms. After quite a severe illness of two weeks he made a good recovery.

My next case was Mrs. B. S., white, aged 25, mother of three children. This woman gave a history of exposure of some months to malaria near the river bottoms, culminating in the present attack of malarial hæmaturia. In this case also the extreme prostrations bodering on collapse, nausea, and bloody urine were the symptoms present. After a ten days illness she made a good recovery.

My next case was with Mr. G. D. K., aged 50 years, white. This gentleman had been exposed for years to malaria, spending a greater part of his time in the river bottoms. When called to see him obtained the following history: Had had a chill on Wednesday night at his camp on the bank of the river—came out next day to his place in the pine woods. Thursday morning had another chill, followed by hæmaturia. It was then that I was sent for. Saturday he had another chill, also another on Sunday, each chill attended by severe prostration, hemorrhage and vomiting. After a critical illness of four weeks he made a good recevery.

It has been my observation that these cases occur in the months of September or October, after a prolonged exposure and repeated attacks of malaria

All cases present a clinical picture of prostration, more or less jaundice, nausea, hemorrhage, either from the bowels, kidneys or stomach, also pronounced anemia.

Treatment.—This can be summed up as supporting, eliminating, expectant, and eternal vigilance. The first indication is to relieve the utter prostration, aching, nausea and hemorrhage. The only drug that can be depended upon is morphine and atropine—this given hypodermatically, p. r. n., until these symptoms are under control. For elimination, calomel and soda, followed by a saline. To act on the kidneys, laxative lithia. To stimulate and produce diaphoresis, the hot mustard foot bath, the hot corn pack, or the hot air bath. As an antidote for the malarial poisoning, quinine per orum, rectum, endermically or hypodermically. Hot saline enemas will be found efficacious to combat shock and to stimulate the kidneys and act on the bowels.

I would warn you against the use of any of the coal tar preparations. Pilocarpin is also a dangerous drug. It is true they will produce profuse sweating, but owing to the great prostration, and fear of collapse, they are dangerous. Tr. chloride of iron, also arsenic, have served me well. Adrenalin has also suggested itself as possible a valuable therapeutic agent, but as yet I have not tested it in any case.

And last, but not least, eternal vigilance is required—and the expectant plan to be followed—if we hope to combat this disease with any degree of success.

The use of quinine is a much debated question. From my own experience, when given with judgment, it is an important therapeutic agent.—THE CHARLOTTE MEDICAL JOURNAL.

A Mirror of Practice.

UROTROPINE AS A SOLVENT OF URIC ACID CALCULI.

Case I.—About three years ago a patient, fifty-five years of age, suffered from vesical calculi, which were removed by lithotrity. The pieces of stone, on being examined, were found to be uric acid calculi. Two years after this the patient complained of symptoms which he had when he suffered from vesical calculi. He was not willing to have his bladder sounded as the symptoms were not very distressing. He was asked to send the urine for examination. On testing, uric acid was found in abundance. Urotropine was prescribed. After using the medicine for a fortnight he felt well, and the urine was found to be quite normal. The patient, however, used the medicine for another fortnight, and since then has had no complaint.

Case II.—A gentleman, about forty years of age, sent for me at night as he was suffering great pain. The pain occurred suddenly, and darted towards the groin, testicle, and thigh, accompanied by nausea and profuse perspiration. I had to use morphia to give him relief from the excruciating pain, and I asked him to send the urine to me for examination. I also instructed him to notice carefully if he passed any calculi. Next morning he sent a small calculus about the size of a mustard seed and a bottle of urine for examination. Uric acid was found in abundance. The small calculus was examined and found to be a uric acid calculus. In this case uric acid was passed in the form of small red crystalline masses like grains of cayenne pepper. Several times the urine was examined immediately after it had been passed, and free uric acid was found. I first prescribed borocitrate of magnesium, which is recommended in Merck's Manual of Materia Medica to dissolve uric acid calculi, the formula of which is magnesii carb., drm. 1; acid citric, drm. 2; sodii biborat., drm. 2; aquæ 8 fl. oz. M. Sig.: 2 drms. T.I.D. As long as the patient used this medicine he was much better, and there was a marked decrease of uric acid in the urine—in fact, the urine was almost normal; but as soon as he stopped the medicine, all the symptoms returned. Urotropine was then prescribed, which was used for a month, and since then he has had no complaint. The urine on being tested at various times was found normal.

Case III.—In September, 1906, a European lad, about eight years of age, complained of urethral discharge. He had phimosis and balanitis at the time, and circumcision was performed, which cured the balanitis, but did not stop the discharge. About a month or so after the circumcision the discharge was stopped, but since then he complained at times of inability to micturate. The catheter was used on each occasion to relieve the bladder. The urine contained a large quantity of red-coloured mucus, which, on standing, formed a distinct layer at the bottom of the vessel. The boy was treated for worms, but without effect and was at last sent to the Medical College, Calcutta, where he was examined, but no stone was found. A German-silver catheter, No. 6, was passed and kept in situ for forty-eight hours. The case was then diagnosed to be impacted calculi in the neck of the bladder and was discharged with the following prescription:—

R	Acid boric	... gr. v.
	Salol	... gr. ij.
	Urotropine	... gr. ij.

Sig.: Thrice daily.

I did not have an opportunity of observing the nature of these calculi, nor to examine the urine, as the boy was sent to school at Darjeeling; but as uric acid calculi is the most common cause, I attribute the boy's condition to it. I have been told by his parents that he does not now complain of anything.

Annotations.

EXERCISE ON HORSEBACK.

Riding has been justly celebrated as a very useful sort of exercise, more especially to invalids. In general, it may be laid down as a rule, sanctioned by experience, that riding is the best exercise for regaining health, and walking for retaining it. Riding certainly strengthens in a most effectual manner the stomach and intestines, and is less tiresome and laborious to the lower limbs than walking, so that persons in a weak state of health can use it with less pain or difficulty.

TOBACCO NERVE DEAFNESS

Tobacco nerve deafness, due to tobacco smoking, may be classified in three groups: (1) Mechanical, (2) irritative, (3) toxic, or nerve deafness.

Toxic, or Nerve Deafness.—This is due to the gradual accumulation of certain toxins of tobacco in the system. Whatever the actual poison may be, whether picrotoxin, pyridin, nicotin, or any other, it is true, as a rule, found in largest amount in the darkest, strongest, and cheapest tobaccos, e.g., cut plug, cut cavendish, shag, etc.; also in cigars of the Maduro strength, Oriental as well as Occidental. This poison is undoubtedly cumulative, since complete abstinence is essential in effecting any permanent improvement; mere reduction in the quantity consumed, or of its strength, generally proves unsatisfactory.

The effect of tobacco toxin upon the heart muscle system is familiar to all of us, also its influence upon the gastro-intestinal tract, which may be responsible for the production of further toxins.

DEATHS FROM CANCER.

It is one of the curious facts in medical research that cancer rarely attacks persons of dissolute and drunken habits. In most of the female patients whose cases are recorded by an eminent medical authority, the victims have been hard working, industrious and home loving women and in a large number of consecutive cases there was not a single individual with either virulent disease or depraved habits. Upon this basis of reasoning it would appear that none of the popular ideas on this disease are very far from the truth.

THE SECRET OF YOUTHFULNESS.

To preserve a youthful appearance one should freely eat fruit and vegetables, but little butcher meat should be included in the dietary. Moreover, one should always be busy, for nothing tends more to prolong youth than congenial employment and an enthusiastic interest in life. The eyes of the indolent and self-centred soon lose their brilliance, and the other features become dull and insipid. Open-air exercise is, of course, good for all, although it should never be forgotten that many busy housewives would derive more benefit from a ride on a 'bus or car than from a walk that might invigorate women engaged in sedentary employments.

WHOLESOME BREATH OF FLOWERS.

The old notion still holds among many people of this and other lands that flowers are not wholesome in a sleeping room. Certain plants, among which are the geranium, the lily and the begonia, are supposed for some unexplained cause to give off an odour at night especially obnoxious. Scientific knowledge and numerous experiments have repeatedly disposed of these delusions, and it is a great pity that people should deprive themselves of the pleasure and satisfaction to be derived from flowers for reasons which are not reasons at all. It is true there are a few tropical plants which give off a perfume unhealthful to breathe at any time, but these plants are rare. The green leaves of all flowers are, on the other hand, most beneficial since they purify the air. Even the doctors are beginning to recognise that they may aid in the cure of disease, and a hospital in New York has a flower ward which is used for the treatment of suitable cases.

Suppose one is confined to one's bedroom with a bad cold, an attack of influenza, bronchitis, or even with consumption, one cannot do better than surround oneself with pots of any kind of plant that has a profusion of green leaves. Geraniums are the least valuable in this respect and strong-smelling flowers, like musk, should be avoided. How the leaves act as therapeutic agents is easily explained. What renders the air of a room stuffy and unwholesome is the carbonic acid we breathe forth. Green leaves, however, breathe it in, consume the carbonic acid, and exhale pure oxygen. Moreover, they give off in vapour the water taken up by the roots, and thus act the part of a bronchitis kettle. Consequently the patient is refreshed, and, provided there is a sufficiency of plants, exhilarated. Even people in health would do well to give this pleasant cure a trial, especially during the months when so much time is spent indoors and ventilation is at its worst. They would find themselves suffering less ennui, fewer headaches, fewer colds, and would also better resist the attack of serious lung diseases.

In Pulmonary Consumption.

Dr. John's CONSUMPTION INHALATION. The Faculty pronounce it the only Cure for Consumption and all Throat and Lung Troubles.

Recommended as a certain remedy in the first and second stages. Is based on scientific reasoning and principles, and is an embodiment of the results of the investigations of Koch Luton and Pasteur, and all the great germ specialists, who have declared that the consumptive germ cannot live a minute in the presence of the ingredients of this wonderful compound. Write to-day. It is a sure cure. The first week's treatment will do more good than all the medicines, Cod Liver Oils, of changes of climate. Don't delay. There is not an hour to lose in cases of Consumption, or any throat or lung trouble. Even in the most advanced and hopeless cases of Tuberculosis and Consumption life is prolonged. Per phial Rs. 4. Packing and Postage 4 As.—Per dozen, Rs. 44.

Dr. T. Foster, A.M., M.D., says :—says I can recommend it with every confidence. It is the very best treatment; simple and effective. Dr. L. Paul, M.D., says : It never failed to cure almost every case. Relief was certain.

Avoid imitations : Only from Ellwood, & Co., Globe Chemical Works, Calcutta.

The Indian Lancet.

CALCUTTA : MONDAY MARCH 23rd, 1908.

MILK AS A MEANS OF SUICIDE.

It is remarkable that so mild and intrinsically harmless a beverage as milk should be so frequently chosen as a means of exit into the other world. Yet in the summer season the lethal effects of milk seem to be much underrated. For example, "a prominent young man died as a result of eating cherries and drinking milk." This is a slight variant from the usual combination. Probably the most deadly is pickles and milk. Strawberries and milk are only mildly toxic; with young and hardy stomachs they are often partially digested; with older ones they frequently cause nothing more than eructative dyspepsia, or, at worst, hives, nettlerash, urticaria, or summer complaint; therefore those who are fond of this combination rarely abstain in the face of these comparatively trifling ailments.

Next to pickles and milk, probably the most deadly form in which the innocent fluid can be made to figure is the cheap icecream combination. Despite the toughness of juvenile viscera, milk in the ice-cream form, if judiciously administered has been known to lay out in intestinal kinks many scores of children on Sunday-school picnics.

With their elders the combination is not infrequently fatal. Of course, it requires much care to make milk so deadly; in fact, with careless mixing this kind of ice-cream may be taken with comparative impunity, or only a slight illness. When it is prepared with attention to the proper septic and toxic conditions, however, milk in this form may be looked upon as practically certain death; it would be invaluable as an apparently innocent means of hurrying off rich uncles, tardy spinster aunts, and other rich persons who linger superfluous on life's stage. In its most potent form, when the innocent milk has become merely a culture bed for billions of ice-cream ptomaines, the doctors call the mixture "tyro toxicon." This name is imposing and scientific sounding, and, doubtless, gives a certain chastened satisfaction to the mourners—much more than would plain milk.

To return to our original remark—it is extraordinary what pains people take to render deadly this harmless beverage. Even if the cow be sound, they will expose the milk to all manner of impurities—including typhoid germs—before they put it inside of them. Even if it be perfectly pure they take it at temperatures and under conditions that are unwise, if not dangerous. To take a glass of milk by itself is a sensible proceeding; to take it on top of a hearty meal composed of proteids, carbo-hydrates, and hydro carbons is most unwise; to take it with acids is to woo dyspepsia. Yet the latter method is the one most preferred, for cream is used as a mechanical lubricant with all manner of acid fruits.

As to temperature—in the summer season people prefer it ice-cold, and some lunatics even put ice into it. If they take it at the temperature of the air, without accompanying solid food, it is probably speedily absorbed without going through the complex processes of gastric and hepatic digestion. If, on the other hand, it be taken ice-cold, it at once coagulates, and the stubborn casein in it sometimes requires hours for digestion: this latter is invariably the case when it is accompanied with solid food.

Many a man and woman has died through drinking freely of iced milk on a hot summer's day. Adelaide Nielson, the beautiful actress, went into a Paris restaurant on the way to the Bois de Boulogne one summer day—one of those broiling, blistering, steaming days of which in Paris they have so many, and of which we hear so little. She ordered a glass of iced milk; she did not sip it—against the advice of her companion, she drank it rapidly, and followed it with another. In a few moments she was dead.

She was a fine actress and a very beautiful woman. They show you the room in which she died. They even point out to you the lounge on which she yielded up her last breath.

Current Medical News.

BOMBAY SANITARY ASSOCIATION.

THIRD ANNUAL MEETING.

The Third Annual Meeting of the Bombay Sanitary Association was held in the Municipal Council Hall under the Presidency of His Excellency Sir George Clarke, Governor of Bombay, when there was a large number of members and friends of the Association. His Excellency was received by Dr. Turner, Mr. W. D. Sheppard, Sir Pherozeshah Mehta, Sir Bhalchandra Krishna, Mr. James MacDonald and Kuvar Vejashinhji, of Palitana, and other members of the Association.

Dr. Turner, the Health Officer, Secretary of the Association, read the report of the work done by the Association in the past year, from which the following are the extracts :—

There were two Male and one Female Health Visitors at the beginning of the year. In April one of the male Health Visitors, Mr. Gupta, went on leave on being sick and unfortunately died in June 1907. Since then we have been maintaining one female and one male Health Visitor on a salary of Rs. 60 and Rs. 40 per mensem respectively. They regularly visited the houses of the poor, morning and evening, and taught the occupants how to improve the condition of their rooms by ventilation, white-washing, disposal of refuse, condition of floor, sanitary conveniences, seeking medical aid in time of sickness, keeping their rooms free from accumulation of dust and refuse and advising them on the prevention of diseases, Small-pox, Plague, Phthsis, Consumption, Diseases of Infants, and the value of Vaccination. The Female Health Visitor has been instructed to explain to the mothers the care of infants, the nursing of the sick, and attention to personal Hygiene and she submits the report of her working during the year, in which she says :—

It will appear from this statement that the Health Visitors have made in all 8,923 visits to the different houses to advise the people in sanitation and hygiene and 1,740 houses have been reported by them to the Health Department for their insanitary condition. 495 houses have been reported for lime-washing, and 440 premises for overcrowding.

To gain an idea of the results of the work done by the Health Visitors in improving the sanitary condition of the poor people living in large chawls, it was proposed during 1906 to offer a prize to the Bhaya or Manager of certain chawls and also to the occupants of the healthiest tenements at the end of the year. As a trial several chawls were selected, varying in population from 200 to 500 persons in each. The chawls selected were such about which the Health Department have had to take frequent action and whose sanitary requirements were greatly neglected by the owner, as well as by the tenants.

The conditions of competition for the Bhayas were to see by frequent visits as to the cleanliness of rooms, latrines, air and light by means of windows, absence of rags, prevention of overcrowding of rooms, notification of infectious diseases and death and sickness, notification of births and death in the chawl and successful vaccination, absence of complaints of choked drains and wasting of water, lime-washing of the rooms once in six months, &c.

ELEMENTARY SANITARY CLASS.

An Elementary Sanitary Class as in previous years was organised during this year also. The class is generally held in the evenings in the Lord Harris Municipal School. Our thanks are due to the Joint Schools Committee and their Secretary for rendering us assistance in this matter. 12 students appeared for Examination at the end of the course and 10 passed the Examination. The Deputy Health Officers of the Health Department and Mr. Fern, Chief Drainage Inspector, conducted the classes.

The mere provision of sanitary appliances is not enough, the people have to be taught how to use them and derive the corresponding advantage. This task is undertaken by the Sanitary Association and by slow degrees people are being educated in the principles of sanitation. Work of this kind is bound to be slow and can only be done by patience and perseverance.

This leads me to put forward a suggestion as to why we should not expand the field of our action. The Bombay Sanitary Association is the only Institution of its kind in India.

What the Association wants is a place of its own, a library and teaching institute with sanitary appliances of all kinds up-to-date. In the absence of these, the members derive no tangible benefit and as a consequence the number of ordinary members has fallen off. Those who continue, to do so from a charitable motive and we are thankful to them. During the year efforts were, however, made and Mr. Damodhar Goverdhandas Sukhadwalla renewed his offer of last year to provide us with a place in the same premises where his free library would be located Negotiations were carried out by him for the purchase of some buildings and sites but nothing definite has yet been settled. He offers to construct a building at his own cost if Government or Municipality were to give him a suitable site rent free.

I think that the time and place are most auspicious for holding the Congress. The Government of India and the Home Government are keenly alive to the necessity for improved sanitation of the Cities and Towns in India, and a Congress which would attract eminent Sanitarians and public men to

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VERONAL is principally indicated in purely nervous agrypnia; further, in all diseases attended with depression; and it is, moreover a very effective and harmless sedative in maniacal excitement. In suburæmic conditions of chronic interstitial nephritis and in compensated cardiac troubles it is of the greatest service

VERONAL, owing to its economic effect on the metabolism of albumen, also exercises a favourable influence on the state of nutrition, and is very much liked by patients.

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VERONAL IS PRESCRIBED IN DOSES OF 4 TO 15 GRAINS. TO BE TAKEN IN HOT TEA.

Free Samples will be Supplied to Medical Men for Experimental Purposes.

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Bombay, even though it be for a short time, would be of great benefit to the City and India, and at the same time instruct those who know nothing of Eastern Cities. It would, while stimulating Sanitary Science, also give an impetus to trade in many directions and would bring before the Scientific and Commercial world ever the growing importance of India in the Councils of the Universe.

I hope to lay a proposal to this effect before the Managing Committee shortly.

His Excellency Lord Lamington, a Life Member of the Association, sent us a donation of Rs. 300 on the eve of his departure.

His Highness Prince Vijaya Dewji, heir-apparent to the throne of Dharampore State, was kind enough to pay a donation of Rs. 500 and became a Patron of the Association.

In moving the adoption of the report, Sir Bhalchandra Krishna congrautlated Dr. Turner on the satisfactory work done by the Association, for improving the sanitary condition of the people. He said that they were deeply thankful to H. E. Sir George Clarke, the esteemed and popular Governor of Bombay—(appaluse)—for having extended his distinguished patronage to the Association. It was a sign of happy augury for the Association that their esteemed and accomplished Governor was that evening amongst them and he hoped that under the ægis the Association would achieve great success in its work.

The Hon'ble Mr. Ebrahim Rahimtulla seconded the proposal, which was carried.

On the motion of Mr. James MacDonald, members of the Committee were re-elected.

THE GOVERNOR'S SPEECH.

His Excellency the Governor then said :—Gentlemen,—The importance of sanitation in Bombay could not be over-estimated. In all great countries the science of sanitation has been regarded as a science requiring special training. Long experience has shown that the practical application of sanitary principles has resulted in the great reduction of death-rate even in cities where epidemic diseases do not exist. And it is certain that the health, longevity and physique of the people of India could be immensely improved by compliance with sanitary laws. I need not say that this would mean greater prosperity, greater happiness of the people. We possess an increased knowledge of sanitation now-a-days, but the main difficulty is to apply that knowledge in India. Government and the Municipality may do their best to make the city healthy and beautiful, but without an intelligent co-operation of the people themselves the efforts of Government and the Municipality may be defeated. The report says : "The mere provision of sanitary appliances is not enough." There is therefore ample scope for the activities of the Sanitary Association. The report shows how much good work has been accomplished in a quiet and unostentatious way. The method which has been adopted to carry on the work of the Association seems to me to be excellent. Nine thousand houses are inspected and I hope it will lead to improving the sanitary condition of 1,740 houses reported to be in an insanitary condition. I am quite sure that the plan of visiting people and instilling knowledge of sanitation in the minds of the people is an excellent thing, and in that way the knowledge will be disseminated to the people, and I think this is the only way by which they can be reached. I hope it may be possible that this branch of the work of the Association will spread in time and there will be a representative of the Association in every ward of the City where the working classes live. The competition between Bayas and tenants for promoting sanitation is also a good thing, and I hope that the prize-winners will be stimulated to greater exertion in acquiring knowledge of sanitation. I find that the classes are not as well attended as the Association would wish, and the reason of it is perhaps that its existence is not sufficiently known and that we should advertise it more. It is clear that the advantage taken by twelve students, ten of whom have passed, shows that the instruction given is appreciated and profited by. And in this direction perhaps the Association may be able to extend its activities. Every member of the Association—and I say that we all are most deeply indebted to the energetic Secretary and Treasurer, Dr. Turner, for his great exertions on behalf of the Association. Dr. Turner has not contented himself with the discharge of his onerous duties as Health Officer, but he has thrown himself into the work of this Association with great zeal and has treated it as a labour of love. Our thanks are also due to other members of the great Medical Profession, who have already given lectures, and I hope the number of these gentlemen who are willing to help in this way will steadily increase in future. I cordially agree with the remark for the need of a Sanitary Institute as a focus of work of this nature and I do hope that the very generous offer of Mr. Damodar Sukhadwalla will lead to some practical step being taken in this direction in a short time. Bombay has taken a lead in sanitary work and I hope that Bombay will always take and maintain a lead in matters that ensure the welfare of the people. It will be also an undoubted advantage if we could hold a Sanitary Congress in the City and invite eminent members from every part of the Empire. I am inclined to think that next year will be a little too soon for such a movement as it is at present in an early stage, and that we should await further development.

"I have proposed a General Medical Conference early next year and I am glad to say that the proposal is very well received. From one source I have been admonished for waiting, and I am told that I should not wait but begin it at once. I do not think my monitor is aware what a conference involves and the time and money required to prepare valuable papers, which would be expected. If my plan comes to be carried out and if you carry it out the next year I will do my best to secure success for the sanitary section in the Conference which will be a footstep towards a Sanitary Congress later.

"I am sorry there is a slight falling off in the number of members of the Association and I hope and believe that as the object of the Association is better known to the people it will ensure a greater measure of public support and success. Nothing can be more important in India, and especially in Bombay as the principal Gate of India, than the sanitation by which the health and consequently the standard of happiness and prosperity of the people can be directly promoted. The sanitary education of the masses is a branch of knowledge which is most important and which this Association helps a great deal to develop in co-operation with Government and the Municipality. I am very glad to meet all of you as it will show my warmest sympathy with the object which you have at heart. I can assure you that I will do everything in my power to help this Association and I cordially wish it every success.—(Loud applause.)

THANKS TO THE GOVERNOR.

The Hon'ble Mr. Dunn, in proposing a vote of thanks to H. E. the Governor, said that ever since his landing in Bombay His Excellency had shown an exceptional interest in all that pertains to the welfare of the help of this city, and his presence would encourage the Association in its endeavour to instil into the minds of the ignorant classes some, at least, of the principles of sanitary science which would assist them at least against preventable disease and death. It would be interesting to them if he mentioned the result recently arrived at some of the chawls which the Improvement Trust had constructed. In the chawls at Agripada and Nagpada there were about 4,500 people. At first the death-rate was 67 per thousand per annum : in another period of six months it came down to 53 In the third period it stood at 42 per thousand per annum, and has recently come down to 27 per thousand per annum. (Applause). This showed what could be done to save lives by paying attention to principles of sanitation. He hoped that the presence of His Excellency and the support given by him to the Association would ensure an additional measure of success and support from the public so that the operation of this Association might be extended and become more efficient. (Applause.)

The Hon'ble Sir Pheorzeshah Mehta in seconding the proposition said that he endorsed what had fallen from Mr. Dunn in praise of His Excellency, and he was sure they would cordially thank the Governor for having given encouragement to the Association by his presence among them support of work which was for the great advantage of the City. If the work of the Association were spread out, there was no doubt that it was likely to work great improvement in the sanitary condition of the people. (Applause.)

The proposition was carried by acclamation and that terminated the proceedings.

SHORT ITEMS.

Mr. Linton, Ward Master at the Calcutta Presidency General Hospital has been arrested and was placed before the Police Magistarte on a charge of misappropriating a trifle over a thousand rupees representing deposit money of patients and hospital dues.

The Army Committee on tuberculosis in the army recommends reserving a number of beds in civil sanatoria at the expense of the army fund. The Committee emphasises the view that the State is not justified in discharging infected soldiers as they became a menace to civilians.

A further haul of 300 ounces of cocaine was made last month last month by the Customs Department among cases of matches imported by the steamer Bharata making in all a little over Rs. 33,000 as the estimated value of the contraband seized.

Both small-pox and plague have made their appearance in Nagpur. The former has caused great mortality and the latter is slowly and steadily spreading in almost every street of the city. The citizens are beginning to camp in the fields.

Colonel Peck, I.M.S., is going home again early next month. He is still feeling the effects of his accident of last year.

Rinderpest is playing havoc with cattle in the Nwebongan village, Upper Burma.

THE value of Fellows' Syrup in the debilitated conditions following Cholera, Malaria, Typhoid, and other fevers, is most marked; and in the treatment of Anæmia, Neurasthenia, Bronchitis, Influenza, Pulmonary, Tuberculosis, and Wasting Diseases of Childhood, and during Convalescence from Exhausting Diseases.

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AN APPEAL.

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This Institution was established with the object of affording facilities for a MEDICAL EDUCATION to Anglo-Indian and Native youths who, for various reasons, are unable to get admission into the existing Government Medical Colleges and Schools. It is under the management and control of an Executive Committee. The education is thorough and the courses complete.

Connected the College are a small Indoor Male and Female Hospital, also a well-attended Outd pensary. In both the HOSPITAL and DISPENSARY everything is free: diet, bedu nedicines, medical comforts, etc. The yearly attendance at the outdoor dispensary is ove ,000 cases.

The Executive Committee solicit public support to enable them to fully and more fittingly carry out the objects of the Institution, more especially of the attached Hospital and Dispensary. The College, with its connected departments, have been maintained, in the past, partly from the fees of the pupils which is quite inadequate for the purpose. The expenses connected with the upkeep of the Hospital and Dispensary are enormous.

Funds are urgently required

1. For medicines, surgical instruments, bedding, diet and other hospital necessaries.

2. For building a Hospital which, unlike the present building, will be the property of the College. For the "Hospital Building Fund" subscriptions and donations are specially solicited.

Gifts of clothing, bedding, suitable furniture, furnishings, medicines, surgical instruments, microscopes, pathological and other specimens, medical books and medical journals (old or new) for the library, articles of food (suitable for European and Native patients, etc.), will be thankfully received.

The Members of the Medical Profession, in India, are respectfully asked to co-operate and help, as much as lies in their power.

All communications and remittances to be sent to—

CALCUTTA :
8 to 8-18, Wellesley Street.

Secretary.

Current Medical Literature.

MEDICINE.

ACUTE RHEUMATISM IN CHILDREN.

Hawthorne (British Journal of Children's Diseases) says that few subjects present so many questions for debate, that it has only been within the past few years that the frequency of rheumatism in childhood has been recognized, notwithstanding the fact that "the most complete and comprehensive manifestation of the various phases of rheumatism belongs to the period of childhood."

Another general question is, "Why does the picture of acute rheumatism in the child differ so conspicuously from that of the same disease in the adult?" Is it because certain tissues in the child are more susceptible and others more resistent to the rheumatic poison than are the corresponding parts in adults? However, in making the diagnosis, we are confronted with the fact that there is no standard by which we can label various clinical incidents as rheumatic; for instance, in adults there are many causes of arthritis recognized, especially a well-defined febrile disease associated with articular disturbances—affecting, for the most part, many joints—and with abundant sour-smelling perspirations, but in children this symptom complex is but seldom seen. Continued high temperature is uncommon, joint disturbances are but slight, and free sweating infrequent. There is, however a class of cases between these two extremes that are no doubt rheumatic, cases that yield readily to anti rheumatic treatment. These mild cases often cause the most harm, the pain in the joints being so slight that the children are not put to rest, so needful a prophylaxis against endocarditis. In many cases only the joints of the fingers and toes are affected.

The author questions as to "What shall be said of the vast multitude of other phenomena which are not presented as expressions of rheumatism in the early years of life—of tonsilitis, pleurisy, bronchitis, pneumonia, chorea, nervousness, anemia, purpura, abdominal pains, epistaxia, nephritis, erythemas, subcutaneous nodules, phlebitis, enuresis, meningitis, orchitis, periostitis, perityphlitis, and the rest? For many of these a good case may certainly be made out, at least to this extent, that more or lees occasionally they occur with the cardiac, febrile and arthritic evidence of the disease. In such circumstances the conclusion in faver of a rheumatic interpretation is a fairly strong one."

In regard to treatment the writer uses salicin, in moderate doses; also the organic salts of potassium or sodium, until the urine becomes alkaline. Early and prolonged rest is without doubt most effective against cardiac complications; due attention should be paid to clothing, domestic hygiene, and climate.

POISON IVY.

Since there is apparently much doubt as to the best method of treatment of the dermatitis of rhus poisoning, the information may be of interest that in the powdered crude sulphur of the stores we possess a remedy everywhere obtainable and usually promptly successful. Its application is best made by mixing it with a little water, and perhaps with a few drops of glycerin, this to be rubbed over the affected area two or three times a day. Next best is its use mixed with just sufficient lard to bind it. As to the time of activity of the poison I remember a patient who infected himself in early spring before appearance of the leaves by tearing out roots in a clearing for garden culture. C. G. AmEnde, M.D.—Medical Record.

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THE HOT WET PACK IN THE TREATMENT OF EXCITED CASES OF INSANITY, AND IN MANIA A POTU.

Excited cases of insanity are controlled by the use of the hot wet pack, with cold applications to the head (see Bulletin of the Ontario Hospitals for the Insane). If an excited patient does not go to sleep after being in the pack thirty minutes, the pack is repeated several times daily, provided it is well borne, before resorting to hypnotics. Among the latter drugs preference is given to veronal, sulphonal, or trional; in some cases grain 1-100 hyoscine is given hypodermically. Thirty grains of sulphonal, given in a glass of hot milk, produces a satisfactory hypnotic effect. In mania a potu the patient suffers from the depressing effects of a poison, which acts on the heart and nerves. Consequently, eliminating action through the skin, bowels and kidneys, is indicated, together with the administration of food. Prompt and excellent results follow the therapeutic employment of the hot wet pack, used until profuse sweating occurs. This is a safer method of producing sleep in a case of mania a potu than the administration of hypnotics, especially if the patient exhibit symptoms of cardiac depression. The artificial warmth of the hot pack, stimulating enemata, composed of castor oil and turpentine, and hypodermic injections of strychnine sulphate, gr. 1-30, repeated, or caffein citrate, gr. iii, or digitalis, answer well in this disease.

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SURGERY.

ACNE ROSACEA AND ERYTHEMA INDICATE GASTRO-INTESTINAL SEPSIS.

There is comfort for the patient with the rubicund nose, even though the dietary recommended be not to his liking. Dr. Leredde reports (Revue Pratique), that in many cases of acne rosacea, he has obtained good results from vegetarianism. As an addition to the strict vegetarian diet, he allows two fresh eggs a day and mild cheese. Wine is to be replaced by water. On this treatment, eight out of ten cases have been benefited; improvement is generally apparent in a month, and is marked in two or three months. Dr. Savill reports, in "Lectures on Neurasthenia," the results of treatment in two cases of cerebral neurasthenia; one case with a flushed (almost bloated-looking face), and the other with advanced acne rosacea. The patient who had the bloated face, a single lady of thirty, had a huge appetite, a long history of intractable constipation, a dropped kidney and cardiac dilatation. The cerebral neurasthenia (melancholia), and the flushed face after meals had started about the same time. She was placed in a nursing home, treated with Schott movements, a rigid dietary, electricity and other methods and, at the end of six weeks, joined her people in the country, and ultimately made a perfect recovery. The second case, the wife of a doctor, had been regarded as melancholic, and had been in several asylums. Her face represented an advanced degree of acne rosacea, which is found in many cases associated with gastro-intestinal sepsis. After six months' treatment by diet, medicines, massage and other measures, she returned to her home after an absence of two years. But, in her case, the treatment came perhaps too late; for, although very greatly improved, she never quite got back her old health of mind.

CHRONIC SUPPURATIVE PROCESSES IN THE HAND. A CLINICAL, EXPERIMENTAL AND ANATOMICAL STUDY. A. B. Kanavel., Chicago. Surgery, Gynecology and Obstetrics. November. 1907.

In a well illustrated and instructive article Kanavel discusses the chief varieties of chronic finger infections, palmar abscesses, etc. He concludes that necrosis of the distal phalanx ordinarily ends in sloughing of the diaphysis alone. Joint function should be preserved. A short but useful distal member remains. Incisions should be made laterally instead of upon the volar surface. The proximal interphalangeal joint is the one most commonly involved in these infections. The proximal phalanx escapes while the epiphysis and part of the diaphysis of the middle phalanx are destroyed. The reason for this distribution is not known.

Conservative operations may be done with some success. Isolated involvement of the tendon sheaths may be present. Incision of the sheath should expose all involved parts. Chronic palmar abscess frequently points on the dorsum, passing along the lumbrical canals. They may be opened along these canals. Complete function may be promised to patients suffering with palmar abscess uncomplicated by tendon-sheath or osseous infection. Chronic dorsal abscesses may point at a distance from the focus, owing to the dorsal aponeurotic sheet.

The carpal joints are frequently invaded from the radial bursa. Abscesses and sinuses appear upon the dorsum. Every effort should be made to preserve the integrity of the tissue between the first and second row of carpal bones. Serious forearm abscesses lie below the flexor profundus digitorum and may be opened either in front, in connection with an incision in the palm, or in isolated cases by lateral drainage.

Trophic changes result from the tendency of the pus to extend along the nerves and bloodvessels. The article is of great importance to those who treat infections of the hands, as for instance to dispensary surgeons, and, together with the author's earlier publications on acute hand infections it deserves careful study.

IN HEPATIC TORPOR AND CHRONIC CONSTIATION.

Rectal examination sometimes aids in determining the variety of obstruction in prostatic hypertrophy. If the prostate is comparatively small, the obstruction is probably due to the middle lobe; if large, to the lateral lobes.—Am. Jour. of Surgery.

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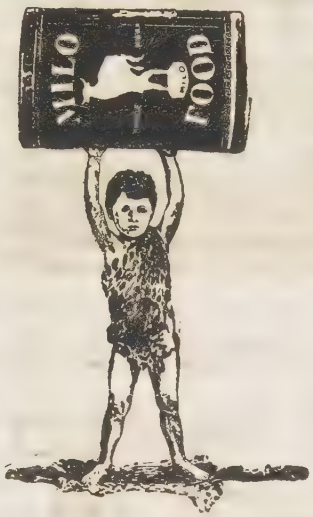

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OBSTETRICS.

THE OPERATIVE TREATMENT OF INTRA-CRANIAL HEMORRHAGES IN THE NEW-BORN.

(Editorial, British Journal of Children's Diseases.)—In this interesting editorial is discussed the possibility of treating intra-cranial hemorrhages of the newly-born by surgical measures.

The diagnosis is made by (1) the history of the labor and especially postpartum asphyxiation; (2) a tense and probably non-pulsatile fontanelle; (3) convulsions appearing a few days after birth; (4) undue reflex activity; (5) ocular palsies or difference in the size of the pupils.

Confirmatory evidence can be obtained by lumbar puncture from the presence of blood cells in the meningeal fluid. Howell Evans, in a communcation to the Society for the Study of Diseases of Children, January, 1904, pointed out that these hemorrhages are due to rupture of blood vessels passing through the parietal bone from the scalp to the interior of the skull, via the sagittal fontanelle, the inter-parietal suture, or the parietal foramen, by the overriding of the bones during labor. Rupture of these vessels produces either a cephalhematoma externa or interna, with intradural hemorrhage. According to Evans, hemorrhage takes place during the reactionary period after birth, reaching its maximum on the third day.

The importance of this subject is manifest when one regards the frequency with which idiocy, imbecility and epilepsy follow these injuries, and there can be no doubt that in the future there will be an increasing disposition to subject such cases to surgical measures.—Journal Obstetrics and Gyned., British, Emp., April, 1906.

THE ALEXANDER OPERATION FOR BACKWARD DISPLACEMENT OF THE UTERUS.

Dr. Charles P. Noble (Trans). Obstetrics Society of Philadelphia) agrees with the majority of gynecologists that retrodisplacement of the uterus was a morbid condition, and that in most patients who consulted the physician it was the cause of symptoms per se and a predisposing cause of congestion of the uterus, of hypertrophy of the glandular structure of the endometrium with resulting leucorrhea, and of prolapse and congestion of the ovaries, and that in a certain percentage of cases, without any specific infection of the vagina or endometrium, the uterus and ovaries became adherent. These remarks applied to non-puerperal cases. Uncomplicated retroversion in the puerperium led to subinvolution of the uterus, and to post-puerperal hemorrhages and leucorrheal discharges. Therefore, he argued, so-called uncomplicated retrodisplacements of the uterus should be cured, not only to relieve the symptoms which existed, but to prevent ensuing complications. The Alexander operation he regarded as the operation of election in nulliparous patients, especially in unmarried women. In such patients the pessary would not keep the uterus in position, and in many cases did positive harm. In other cases it would keep the patient comfortable as long as it was worn, but as a result the patient was tied to the physician's office. In puerperal cases the tampon to promote involution, followed by the Smith-Hodges pessary, would probably cure one-third of the cases. In married women of the child-bearing age, when the pessary keeps the uterus in position and the patient comfortable, its use was rational and preferable to an operation. In all other uncomplicated cases the Alexander operation should be performed. He had performed this operation about two-hundred times. A study of ninety-five cases showed the following results: Anatomical failures, 1; anatomical cures, 94; symptomatic cures 75; partial symptomatic cures, 12; symptomatic failures, 7; number of pregnancies, 39; complications during labor, 0; miscarriages, 9 (one patient having had 3).

In its proper field the Alexander operation was the ideal one. The operation was never done in the presence of a history of infection and peritonitis, nor unless examination under anesthesia showed the uterus to be freely movable and the adnexa without palpable disease. When these conditions were not met with the Alexander operation was rejected and the abdomen opened.

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PATHOLOGY.

FURTHER OBSERVATIONS ON OPSONINS IN NORMAL AND PATHOLOGICAL SERA.

N. B. Parker, New York Journal of the American Medical Association.

From a comprehensive study of the variations of the opsonic index in normal and pathologic conditions, determined by Wright's technic and including the consideration of all the probable factors, such as the method of obtaining the blood, and the effects of transportation, Potter deduces substantially the following conclusions: 1. Wright's method of estimating the opsonic indices in bacterial infections is hardly accurate enough to compensate for the amount of time it requires. There is a general parallelism, however, between the opsonic indices and the clinical course in most cases, so that these determinations should be made when the results of inoculation can not be controlled by the ordinary clinical methods of observation, when there are several organisms present and when the patient does not improve under the usual method of inoculation. 2. Its variations depend on (a) difference in normal sera, so that even with counts averaged from two, three or more supposedly normal sera, it is not possible to prevent variations of from 10 to 30 per cent.; (b) differences depending on the

sources of the leucocytes; and (c) differences depending on counting different areas of a slide. 3. The leucocytes from patients, the subjects of bacterial infection, do not always agree in phagocytic activity with those from supposedly normal individuals. During recovery for from some infections their activity surpasses that of the leucocytes of some supposedly normal persons, and during convalescence from some infections it falls to or below that of the normal leucocytes. 4. The inoculation of dead cultures of homologous or heterologous bacteria is helpful or curative in many local infections. Some patients with septicemia, however recover without inoculations, so we must be careful in attributing recoveries to this cause. Some general and local infections are too severe to be thus helped. Some very chronic and obstinate local infections may be helped by inoculations, but it is probable that their response can be easily exhausted by too large, and perhaps by too frequent doses, and it is very doubtful if such advanced cases can be completely cured by inoculation.

HYDRARGYRI CHLORIDI MITE AS AN ANTISEPTIC.

Theopold speaks highly of the value of calomel as an antiseptic for general surgical use and especially in obstetric practice. It has been employed under his direction in from 4000 to 5000 confinements conducted mainly under the care of midwives, and the results have been extremely satisfactory. The agent owes its safety to its insolubility in water and watery fluids, while its antiseptic property appears to depend on its capacity to produce coagulation albuminous substances when brought into close contact with them. Experiments with pathogenic bacteria have shown that its antiseptic value is quite high, and that when applied to a given surface it is perfectly capable of preventing infection by small amounts of bacteria. If it is applied together with iodoform a mutual decomposition results with the formation of the iodide of mercury, and the antiseptic action produced is much greater than that of either agent by itself. As ordinarily used there appears to be no danger of causing intoxication by the application of calomel for these purposes, and the author warmly commends it as a dusting powder to be applied to the hands after these have been sterilised in the usual way before performing any obstetric manipulations.—Medical Record.

THERAPEUTICS.

MULTIPLE WARTS.

Cooper (British Med. Journal) reports the cure of multiple warts by taking lime water internally. He came upon this accidentally by taking lime water, a wineglassful before meals, for digestive disturbances. At the end of two weeks a wart on his thumb which had resisted local treatment disappeared. He tested other cases with marked success. The warts generally disappear in from four days to six weeks. He administers it in milk.—The Lancet-Clinic.

CALCIUM SALTS IN PNEUMONIA.

Brunton calls attention to the tendency to cardiac failure in the epidemic of postinfluenzal pneumonia now prevalent in England. Such cardiac failure may, he thinks, be to some extent averted by the free use of calcium salts, which have a tonic action on the heart. The only harm it is likely to do, is to increase the coagulability of the blood, but this is small compared to the risk from cardiac failure, It is given in five to ten grain doses every four hours, simply dissolved in water. As it is very deliquescent it can only be kept in solution. It has a very disagreeable saline taste, but this can be very well covered by saccharin, one-twentieth of a grain of which is sufficient for every ten grains of the calcium chloride. Encouraging results have also been obtained in cases of cardiac disease, where the ventricular wall appeared to be losing power. It is quite possible that the great benefit frequently observed from the use of milk diet in cases of heart disease may be due, in part, at least, to the lage quantity of calcium salts the milk contains.—N. Y Med. Jour.

SYNTHETIC CAMPHOR.

Professor Dr. A. Langaard and Dr. Th. A. Maas, in an article on racemic camphor (Therapeutische Monatshefte,) write, after an introduction on the various isomeric forms, and with special reference to the optic one, as follows :—

To enlarge knowledge on this subject still further it appeared to us to be of interest to examine pharmacologically the optical isomerics of the racemic or synthetic camphor, as well as the Borneol camphor. The examination was greatly facilitated by sufficient material generously provided by Messrs. Schering.

Without referring to any details in the examination, on which we shall report fully elsewhere, we give here only the actual results.

As regards the effect on the heart, it is well known that, in spite of the large number of experimental examinations, which all deal with the effect of the R. (right turning) camphor, a unanimous decision respecting its influence on the heart has not been arrived at.

In corroboration of Winterberg, and contrary to previous authors, we could not notice an increase in cardiac activity in an intact heart through the R. camphor.

As it was our object to examine the three optic isomerics it was of interest to see whether the racemic (synthetic) camphor or the L. (Borneol) camphor showed such effect.

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Children - „ One or Two Dessertspoonfuls daily, either pure or mixed with any convenient liquid.
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is a combination of the purest extract of cod livers, soluble iron, and the most reliable tonics—agreeably put up with carminatives, constituting a mild and grateful cordial. Refreshing, agreeable and stimulating.

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CONSUMPTION INHALATION CURE.—Recommended as a certain remedy in the first and second stages. Is based on scientific reasoning and principles, and is an embodiment of the results of modern investigation. It kills the germs (bacilli), checks the progress of the disease, and prolongs life even in the most advanced and hopeless cases of tuberculosis and consumption. Per phial, Rs. 5. Per dozen, Rs. 55.

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Are "brisk" and "direct" in their operation, being unattended with any disagreeable effects such as griping, nausea, vomiting, pain, &c.

These invaluable Pills are prepared with the greatest care, and have the remarkable property of neither weakening the system nor causing constipation immediately after. For Dyspepsia and Torpid Liver they can be confidently relied on as the best Family Medicine to have handy in the house. Price, Re. 1 per phial. Per dozen, Rs. 11.

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PRICKLY HEAT POWDER.—Instantly relieves the unpleasant itching consequent on the appearance of prickly heat. A boon to worried adults and fractious children. Per bottle, Re. 1. Per dozen, Rs. 11.

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THE NEW INEBRIETY CURE.—This preparation is prescribed with the most wonderful effects in the treatment of persons suffering from the constitutional and other results of excessive indulgence in alcoholic liquors. It may be administered unknown to the patient mixed in his (or her) usual drink. It creates an intense "loathing" for spiritous liquors of any kind. Try it on those near and dear to you and you will be astonished as to its marvellous effects. Per bottle, Rs. 5. ½ doz., Rs. 14; ¼ doz., Rs. 28; doz., Rs. 55.

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SURF SEA SALT.

Recommended by the Highest Medical Authorities.

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Piles. Piles. Piles.

ELLWOOD'S PILE-CURE PILLS.—Immediate relief. Operations are rarely necessary if these Pills are used regularly. They cure Piles of every form. Neat and clean. Pure and sure. Per Phial, Re. 1-8. Per doz., 16-8.

ELLWOOD'S PILE OINTMENT.—For Blind, Bleeding, Ulcerated, and Itching Piles. It absorbs the tumors, allays the itching at once, acts as a poultice, gives instantaneous relief. Per Pot, Re. 1. Per doz., Rs. 11.

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ELLWOOD & Co., Globe Chemical Works, CALCUTTA.

We found, however, that neither of the three forms possesses this. In conformity with the observations of other authors, in all three bodies we observed a temporary increase in the blood pressure, which appeared periodically, but always ascertained that this was due to the consequences of central irritation or excitement. On the other hand, a favourable effect was immediately observed on a frog's heart which had been affected by chloral hydrate. Immediately after sprinkling a salt solution well shaken with camphor (immaterial which of the three isomeric forms) on the heart, a decided improvement in cardiac activity set in. The beating of the heart, which, in consequence of the chloral, had entered the stage of periodicity became after the application of camphor, and after a very short latent period, again rhythmic, and continued in such condition for a longer or shoter time, until the chloral poisoning became again more prominent, which, however, was once more overcome by further camphor treatment.

The above-mentioned excitement of the central nerve system was present in all three forms of camphor, and may after large doses even assume the form of fits (Krampfe) which generally set in with trismus. A difference exists here, but only of a quantitative kind. The left (L.) camphor produces the strongest effect, the R. the least effect, whilst the racemic camphor takes an intermediate course.

The examination of the three forms on respiration led to the same results. In all cases an increase was observed, which referred equally to the frequency and to the breathing volume, and which, as regards its strength, was subject to the above decline.

The molecular formation of the racemic camphor is of special interest, and its combination from R. and L. camphor was clearly noticeabele in its effect.

In conclusion, it may be said that Professor Grawitz was good enough to try the racemic camphor therapeutically in place of natural camphor at the Charlottenburg Hospital. No differences were observed either after internal or external application.

GOOD RESULTS WITH DYMAL.

By Dr. E. Kleine, Veterinary Surgeon, Schellerten, Hanover.

The exceptionally favourable results of my experiments induce me to give them publicity. With a small sample quantity of Dymal I treated some dogs, including two valuable Newfoundland dogs, that were liable to weeping eczema owing to tender and sensitive skin. The malady refused to yield to treatment, or returned when there had been an apparent improvement, after prolonged attempts at cure with all kinds of preparations. Remembering that curative powers in skin affections were claimed for Dymal, I put it to the test. I was surprised and pleased to find that one to three applications of the powder resulted in the healing of the sores, some of which were the size of a saucer. The skin regained its softness and the places were soon covered with new hair. These dogs were entered for exhibition, and but for Dymal they could not have been shown. Iodoform, xeroform, zinc, tannic acid, alum, creolin, lysol, ichthyol, mercury preparations, resorcin, beta-naphtol, all these had been tried and all had failed. Dymal achieved a cure in a comparatively short period. (I should mention that with all outward applications I employed liq. pot arsen. internally.) Encouraged by these results I have for eight months used it at every possible opportunity.

In my opinion, Dymal is superior to other wound dressings in the treatment of open sores, melanders (eight cases healed exceptionally quickly and well), and even in panaricium. For infected wound cavities I employed a Dymal pencil (prepared with cocoa butter), and always obtained a quick reduction of temperature. Injured arteries were secured, carefully cleansed, and the wound thickly sprinkled with Dymal. The healing process was very rapid, and after a few days the animals were fit for use. I could cite many cases.

In intestinal catarrh I have given Dymal internally, but am unable to say whether the improvement was due to the drug. Its principal action (apart from its properties as a wound dressing) consists in a favourable influence on chronic and obstinate wounds, eczemas, &c. Not once have I been disappointed in this connection during these eight months. In addition, there are the advantages of Dymal being a white substance, and very easy and convenient of application owing to the extreme fineness of the powder, which possesses great absorbing powers. The powder does not clog the hairs, and at the same time penetrates into all creases and folds; it is, furthermore, quite odourless. Dymal is thus a very clean preparation to use, in contrast with most of the ointments and salves generally applied in these cases. A crust quickly forms over the wound and healing commences immediately.

For these reasons I consider Dymal quite an ideal remedy in canine practice, and, in fact, for the treatment of animals, that are in continual contact with human beings.

From my experience, I feel justified in drawing the attention of my colleagues to this, preparation, in order to induce them to try it themselves. Many may be on the look-out for a reliable dressing, as I had been before using Dymal.

There is no universal remedy; but if Dymal, as a wound dressing, realizes what it appears to promise, then its employment on a large scale is certain, as it is non-poisonous unlike the majority of preparations. This non-toxic property is of particular importance in the treatment of dogs and other animals that lick sores and thereby remove any preparation applied to them. Contrary to popular belief, this licking often prevents healing and turns an acute affection to a chronic one, making treatment difficult and protracted.

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Correspondence.

Audi Alteram Partem.

THE STUDY OF INSANITY.

To the Editor, The Indian Lancet.

SIR,—A field of research which, sad to say, is a very large one and a direct product of civilisation, is insanitary and so convinced is Dr. Maudsley, a well-known specialist in diseases of the mind, of the importance of qualifying medical students to deal with this, that he has offered to the London County Council thirty thousand pounds for the building of a hospital devoted to the study of it. This will hold one hundred patients in the early stages of derangement, patients who must otherwise go to the workhouse infirmaries, from which they are bound to be turned out at the end of a fortnight into the great country asylums, and here the three great objects, treatment of cases in the hospital, and not in the asylum, manner, the education of students, and the discovery of the causes of insanity, will be aimed at. Insanity Dr. Maudsley declares to be constantly caused by toxins, or poisons, in the blood, generated by some disordered organ, and his professors are to experiment for the discovery of the anti-toxins. Very especially too he desires that insanity should not remain the isolated subject it is, but should be "dealt with like an ordinary disease"—which another sense it certainly is nowadays. The commonness of mental disorders is such that a whole new language has grown up to classify and describe them, and you may search in vain through respectable dictionaries of five or six years of age for terms which you meet in any newspaper.

Yours etc.,
S. W. K.

THE ALLEGED HOSPITAL FRAUDS.

To the Editor, The Indian Lancet.

SIR,—The other day the Bhowanipore Police sent up Mr. A. F. Linton, Ward-master of the Presidency General Hospital, for trial before Moulvi Mohamed Abdoollah, Police Magistrate of Alipore, on a charge of criminal breach of trust and misappropriation as public servant in respect of various sums of money.

It was alleged that some patients of the hospital deposited cash and valuables with the accused for safe custody, and Lieutenant Douglas, a patient, deposited Rs. 426 with the accused. At the time of his discharge he wanted back his money, but the accused could not be found. The matter was brought to the notice of Colonel Pilgrim, Surgeon Superintendent of the hospital, who on inquiry found that the accused had misappropriated the deposit and various sums of money from patients. It was discovered also that the accused had misappropriated the following sums: Rs. 573 from Mr. Oakley; Rs. 50 from Mr Orr; Rs. 80 from Mr. Harvey; Rs. 21 from Mr. Malchus; Rs. 20 from Miss Rillo, and Rs. 20 from Miss Guilt during the last six months. The police succeeded in recovering a metal watch and chain belonging to Mr. Oakley. When the case was called for hearing Court Inspector B. Mitter intimated that the Public Prosecutor was engaged and prayed for an adjournment. The case was accordingly postponed, the accused being remanded.

Yours etc.,
C. W. S.

FEVER MORTALITY IN INDIA.

To the Editor, The Indian Lancet.

SIR,—During the year 1906 nearly 4½ million deaths were registered in India under the head of "fevers," and in Bengal, Eastern Bengal and Assam, and the Punjab 80 per cent. of all deaths that occurred were so recorded. Fever in India is generally understood to mean malaria, but it is pointed out in the Sanitary Report just issued that many causes of death and many diseases much more fatal than malaria are included under the general heading "fevers." Colonel Leslie, Sanitary Commissioner, adds that though it is not possible to ascertain with any approach to accuracy what proportion of deaths recorded as caused by fever are due to malaria the proportion for India as a whole is almost certainly not higher than between 20 and 30 per cent.; in all probability it is much lower. Colonel Leslie shows that of the patients who attended dispensaries in 1905, only 141 per 1,000 were suffering from malaria, and this ratio may be assumed to be at least equal to the death-rate from the disease. This would make the death-rate from malaria in that year 25·9 per cent. of the mortality recorded under the head of fever, and in 1906 on similar data the death-rate would be 26 per cent. It would, of course, be far from the truth to say that all who suffered from malaria in these years died, but the figures are sufficient to show that the estimate between 20 and 30 per cent. mentioned above is certainly not too low. If it be assumed that the true mortality from malaria in 1906 was 25 per cent. of the deaths recorded as due to fever, the number of deaths from malaria in that year in British India would be 11,53,210, or a death-rate of 4·9 per mille of the population. To compare the mortality from malaria with that due to plague: in 1904 the deaths from plague in British India were 935,010; in the following year they were 940,820 but in 1906 there was a satisfactory fall to 300,355. This last figure is almost the same as that for deaths registered under the head of dysentery and diarrhœa and much less than half the number of deaths ascribed to cholera in the same year.

Yours etc.,
PYTHIAS.

Those drugs which invariably effect the immediate relief of menstrual disturbances by acting directly, and in an agreeable manner, upon the reproductive apparatus, are collectively presented in

ERGOAPIOL (SMITH)

The preparation exerts an impressive anodyne and sedative effect upon the uterus and ovaries, and imparts vitality and functional activity to the entire generative system. While the function-promoting action of the preparation is surprisingly prompt, no untoward effects attend its administration.

ERGOAPIOL (SMITH)

IS OF INESTIMABLE IMPORTANCE IN THE TREATMENT OF

AMENORRHEA, DYSMENORRHEA

AND OTHER

MENSTRUAL IRREGULARITIES

DOSE.—ONE TO TWO CAPSULES, THREE OR FOUR TIMES A DAY, ACCORDING TO THE EXIGENCIES OF THE INDIVIDUAL CASE.

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LITERATURE.—PAMPHLETS BEARING UPON THE THERAPY OF THE PREPARATION WILL BE SENT, POST PAID, ON REQUEST.

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FEVER, DYSENTERY and INFLUENZA.—*Vide "Lancet" of Sept. 30th, 1899.*

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It contains nearly 80 per cent. of MEAT ALBUMEN.
It acts directly as a TONIC and creates an APPETITE.
It is NOT a DRUG, but a THERAPEUTIC FOOD.
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Causes NO GASTRIC DISTURBANCES or CONSTIPATION.
Does NOT AFFECT THE TEETH.
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Contains the ALBUMINOUS MATTER OF MILK, combined with 5 per cent. of TANNIC ACID.
Is slightly ASTRINGENT and NON-IRRITANT.
Is most suitable for STRENGTHENING WEAK DIGESTIVE ORGANS.
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FARBENFABRIKEN BAYER & CO., LD., Hornby Row, FORT, BOMBAY.

MR. BERNARD SHAW ON SOCIALISM AND DOCTORS.

To THE EDITOR, THE INDIAN LANCET.

SIR,—Mr Bernard Shaw was most diverting in his address at the Medical School in Hunter Street the other day. He dared greatly in all he said about doctors, criticising every class of medical men with a freedom as fearless as it was amusing. Socialism was the subject of his discourse. Before long he was applying it vigorously to the medical profesion, declaring that until the State was responsible for the income of the doctor, he could not be a really independent man. At present he had more to do in trying to please his patients and in keeping up appearances than in curing by his art. The days of the witch-doctor and the charlatan are by no means over. Many people were ready to go for relief to any one but a regular medical man, and it was not stupid commonplace persons who had recourse to Eugene Sandow and Eustace Miles, but the brilliant and clever men who thought, because these men treated them scientifically, while a doctor pulled out of his pocket a pill or a bottle supposed to cure each disease. Bernard Shaw asserted that the competition for bare life in the medical professional had demoralised the present day general practitioner. A friend of his had a large practice among householders who were considered wealthy if they had a pound a week. He had many night-calls, and the following questions were often asked through the speaking tube: "Who are you?" "Which road?" "Have you got the money?" "Rattle it against the tube," and when that welcome sound was heard, the doctor got up to attend the patient. These precautions he was obliged to take to earn any kind of a living, for too many of his fees were recovered through the County Court. Long ago when the Peculiar People were summoned for treating their children by prayer alone and letting them die without the intervention of a doctor, it was difficult to get a conviction, for it was impossible to get a doctor to swear that if he had been called in, the life of the child would have been saved. Nowadays, said Mr. Shaw, any number will leap blithely into the box and swear that they could have cured the child.

The Christian Scientist flourishes on the simple beliefs of people who have no faith in medicine. If you want to see a doctor become a lunatic before your eyes, declared Mr. B. Shaw, ask him, when he is inveighing against Christian Scientists as murderers, if he had never lost a patient from diptheria or any other disease? This, and much more the speaker committed himself to, rubbing into his audience much against their will, that true socialism if adopted by the State in reference to medicine would render doctors free and independent men. At present they lived on the illness of the public, they would then draw their incomes from the public health. Doctors, of all people, should long for the even distribution of wealth, for no sooner was a man comfortably off than he started a disease and a doctor. The poor, who can't pay have the diseases right enough and give the doctors plenty of work, which to their honour is frequently done for charity. It is often heart-breaking to the kind man to order good food and sanitary conditions for a poor patient when he knows that he might as well order a yacht or a motor car. Mr. Shaw girded at the doctors who belonged to what he might call the Listerian period of medicine, when the germ theory began to rule. He would as soon see an alligator at his bedside as one of these gentlemen. There are, again, the health officers who judge by statistics which are really hopelessly misleading. The anti-vaccinationists' statistics are only equalled in absurdity by the Vaccinationists and those of the Tariff Reformers by the Free Traders. He once tried to palm off statistics on Sir Wilfrid Lawson by telling him the gloomy news that fifty per cent. of the teetotallers in an Indian regiment were dead, and fifty per cent. invalided home. Sir W. Lawson, being a politician, knew the net value of statistics, and discovered the fact that there were only two teetotallers in the regiment, one of whom was killed and eaten by a tiger and the other tripped and broke a leg stepping on board a trooper and reached home as an invalid. Altogether Mr. Bernard Shaw contrived to amuse, if he did not convince his audience.

Yours etc.,

R. F.

IMPORTING MORPHIA TO RANGOON.

To THE EDITOR, THE INDIAN LANCET.

SIR,—Babu C. L. Mittra, clerk of the Factory Commission, was sentenced by the Magistrate to nine months' rigorous imprisonment for importing from Calcutta 100 ounces of morphia, on the arrival of the Factory Commission, by the Steamer Lunka some three weeks ago.

Yours etc.,

H. F. MARKES.

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URIC ACID SOLVENT.

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Most efficient in eliminating toxic products from intestinal tract or blood, and correcting vicious or impaired functions.

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URGENT NEED IN DELHI.

TO THE EDITOR, THE INDIAN LANCET.

SIR,—The question of providing European Hospital accommodation at Delhi has been airily shelved by the Punjab Government on the ground that the proposed contributions by the various railways connected with Delhi are wholly inadequate—indeed ridiculously so.

The Dufferin Hospital in Delhi City is entirely devoted to and usually chock full of natives. There is no available separate accommodation for Europeans nor, most important, any separate infectious ward available for the latter.

An instance occurred about a year since of a European tourist who contracted virulent small-pox having to be removed from the hotel and segregated in a distant empty bungalow where he died. And in a contingency of an epidemic disease as plague or a possibility of a railway accident occurring near the great railway centre such as Delhi, the conditions would be those of a seige and the patients would have to be accommodated somehow or anyhow, the problem involving grave difficulty to responsible authorities.

Delhi has a resident non-military population of some 500 Europeans and Anglo-Indians. Some 2,000 tourists visit Delhi each cold season, while there is a constant stream of commercial visitors throughout the year.

The minimum cost of a hospital building is Rs. 40,000 plus Rs. 5,000 for equipment. The Municipality can only arrange the cost of up-keep, being saddled by repayment of heavy loans to the Bank of Bengal for several years hence incurred by expenditure on drainage scheme and being barely able to raise funds for ordinary urgent work as repair of public roads.

A large Zenana hospital, raised by Mission effort, will shortly be available to the Indian community apart from the Dufferin General Hospital for Natives, already referred to, and the present problem of providing for the unfortunate representatives of the ruling race is one that the Government of India must solve speedily.

Yours etc.,

W.

HEALTH OF BOMBAY.

TO THE EDITOR, THE INDIAN LANCET.

SIR,—For the year 1906 the sanitary Commissioner for the Government of Bombay returns the birth-rate at 33·84 per mille, which is a distinct improvement on the previous year. But there is reason to believe that these figures do not represent the actual facts, says a Bombay paper, for very considerable difficulty is experienced in getting children registered. The system is undergoing revision, and we may look for still more favourable figures in future returns. An example of what can be done, even under existing circumstances, is given in Mr. S. M. Edwardes' review of the report. In 1905 the birth-rate for Nasik City was returned at 10·33; in 1906 it was 34.01. Of course, the difference is wholly due to the efficiency of registration. Here in Bombay City Dr. Turner revised the whole machinery of registration with very similar results. The problem of the high number of still-born has yet to be solved. The review of the report says with regard to Bombay that it is possibly due to grossly insanitary conditions of many parts of the City, the notorious ignorance of the Indian midwife and the semi-religious and semi-social superstitions of the people themselves. The death-rate in 1906 went up to 35·66, due chiefly to outbreaks of plague and cholera, in the Presidency proper, and malaria in Sind. Every effort was made to reduce the virulence of plague and cholera, and in many cases with conspicuous success, but malaria requires more attention. Mosquito breeding grounds must be destroyed. It is gratifying to learn that a definite plan of campaign, comprising a complete preliminary survey and estimates of cost, will be without delay formulated for each affected area. There were 46,000 deaths from cholera, and 12 per cent. of the villages in the Presidency were infected as against 2 per cent. in the previous year. The total mortality from plague declined from 71,363 in 1905 to 51,525 in 1906. In his resolution on the report the Governor calls attention to the importance of the improvement in the water-supply and drainage of towns in the suburbs of Bombay.

Yours etc.,

C.A.P.

PLAGUE IN BURMA.

TO THE EDITOR, THE INDIAN LANCET.

SIR,—A press note issued in Rangoon the other day stated that there was a further increase of plague in February, the figures showing 1,520 seizures and 1,431 deaths, compared with 1,011 seizures and 953 deaths in January, and with 321 seizures and 396 deaths in December. The largest increase were reported from Mandalay, were 360 cases occurred last month as compared with 209 in January. In Rangoon there were 106 seizures and 104 deaths. Other noticeable increases occurred in Tharrawaddy, Bassein and the Maubin Districts. Exclusive of Rangoon and the Northern Shan States plague occurred in 18 districts.

Yours etc.,

W. G. L.

Wanted known, that a Dispensary, where all medical and surgical accessories are available has been opened at 3, Wellesley Street, under the name of Ellwood & Co. Dr. Das attends daily.

Prescriptions dispensed day and night, and urine analysis done.

In all disorders of the respiratory tract in which inflammation or cough is a conspicuous factor incomparably beneficial results can be secured by the administration of

Glyco-Heroin (Smith)

The preparation instantly diminishes cough, augments expulsion of secretions dispels oppressive sense of suffocation, restores regular, pain-free respiration, and subdues inflammation of the air passages.

The marked analgesic, antispasmodic, balsamic, expectorant, mucus-modifying and inflammation-allaying properties of

Glyco-Heroin (Smith)

explain the wonderful curative action of the preparation in the treatment of

Coughs, Bronchitis, Pneumonia, Laryngitis, Pulmonary Phthisis, Asthma, Whooping Cough

and the various disorders of the breathing passages.

Glyco-Heroin (Smith) is admittedly the ideal heroin product. It is superior to preparations containing codeine or morphine, in that it is vastly more potent and does not beget the by-effects common to those drugs

DOSE—The adult dose is one dram, repeated every two or three hours. For children of more than three years of age, the dose is from five to ten drops.

Glyco-Heroin (Smith) is marketed in one-pound bottles, thus enabling the physician to prescribe whatever amount the individual case may require. The prevailing prescriptions are for three ounces. The preparation is obtainable at all prescriptionists.

LITERATURE.—Exhaustive literature bearing upon the preparation will be sent, post paid, on request.

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Argentamine. Two per cent. solution of Silver Nitrate in Ethylenediamine. An organic Silver Salt possessing the property of penetrating very deeply into the tissues. Its use is not accompanied by the many inconveniences to the patient which are found with the ordinary Silver Salts.

Chloralamid. Superior hypnotic without harmful or unpleasant by-effects, having the following advantages over Chloralhydrate:—Its action develops more gradually. The depressing effect of Chloral upon the heart is counteracted by the action of the formamide contained in Chloralamid. It does not cause headache. Chloralamid should on no account be dispensed in hot solutions.

Lævulose. Is fruit-sugar for Diabetics, being perfectly assimilated, and constitutes therefore a superior dietetic also for consumptive patients.

Phenocoll. Soluble Phenacetine. A valuable anti-pyretic, anti-rheumatic, and anti-neuralgic. Recommended in malarial fever. Harmless to the action of the heart and circulation of the blood.

Piperazine. Freely dissolving urinary deposits, is promptly eliminated by the kidneys, and perfectly harmless. Strongly recommended in all cases of uric acid diathesis.

Sublamine. A preparation containing Mercury Sulphate and Ethylenediamine in chemical combination. By the presence of Ethylenediamine the irritating action to the skin is entirely avoided, and, what is equally important, a most phenomenal penetrative power is secured for the metallic disinfectant, inasmuch as the presence of Ethylenediamine prevents the coagulation of the albuminous substances of the skin usually produced by metallic agents, and thus permits of easy and deep penetration of the Sublimate without any inconvenience. Recommended for thorough hand disinfection.

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Reviews of Books.

A Text-book of Treatment. Part I. Obstetrics and Gynæcology. By John Campbell, M.A., M.D., F.R.C.S., Eng—Surgeon Samaritan. Hospital for Women, Belfast. 10s. net. Publishers: —Sidney Appleton-London.

This series has supplied a clear, practical and readily available book of reference to the busy practitioner. It is quite up to date and concise. The authors 20 years' hospital and private experience guarantees the thoroughness of the work.

The plan of treating the subjects in alphabetical order is very commendable especially to the busy general practitioner, the illustrations are very apt and instructive. The get up is very nice.

Hospital Training—School Methods and the Head Nurse. By Charlotte A. Aikens, late Director of Sibley Memorial Hospital. Washington, D.C. 12mo of 275 pages (cloth 6s. 6d. net. Publishers:—W.B. Saunders Company Philadelphia and London.

This hand book is an endeavour to fully discuss some of the aspects of the training school problem; and to afford help to beginners in the work of teaching and hospital supervision. It is indispensable to those who aspire to become head nurses. The authors own extensive experience of the methods are incorporated in this work. It supplies a keenly missed book in the nursing department.

Government Medical Notifications.

INDIA.

The services of Colonel J. McCloghry, F.R.C.S., I.M.S. (Bombay), are placed temporarily at the disposal of the Government of Bombay.

The services of Major K. V. Kukday, I.M.S. (Bombay), are placed permanently at the disposal of the Government of Bombay.

Lieutenant-Colonel A.M. Crofts, C.I.E., I.M.S. (Bengal) an Agency Surgeon of the 1st class, Agency Surgeon and Administrative Medical Officer, North-West Frontier Province, is appointed to officiate as Inspector General of Civil Hospitals and Sanitary Commissioner, Central Provinces, during the absence on leave of Colonel P. A. Weir, M.B., I.M.S. (Bengal), or until further orders.

Lieutenant-Colonel F. F. Perry, F.R.C.S., I.M.S. (Bengal), Principal and Professor of Surgery, Medical College, Lahore, is granted furlough out of India for one year three months and 23 days, with effect from the 8th March 1908.

Major D. W. Sutherland, M.D., C.M., I.M.S. (Bengal) Professor of Medicine, Medical College, Lahore, is appointed to officiate as Principal of that college, in addition to his own duties, during the absence on furlough of Lieutenant-Colonel F. F. Perry, F.R.C.S., I.M.S. (Bengal), or until further orders.

Major E. V. Hugo, M.D., F.R.C.S., I.M.S. (Bengal), is appointed to officiate as Professor of Surgery, Medical College Lahore, during the absence on leave of Lieutenant-Colonel F. F. Perry, F.R.C.S., I.M.S. (Bengal), or until further orders.

The services of Major W. W. Clemesha, M.D., I.M.S., are placed temperarily at the disposal of the Government of Madras.

BENGAL.

Lieutenant-Colonel T. Grainger, I.M.S., officiating as a Civil Surgeon of the first class, is confirmed in that class, with effect from the 17th February 1908, vice Lieutenant-Colonel J.B. Gibbons, I.M.S., retired.

Lieutenant Colonel J. G. Jordan, I.M.S., Civil Surgeon Midnapore, is appointed to act as a Civil Surgeon of the first class, with effect from the 17th February 1908, during the absence, on leave, of Lieutenant-Colonel J. Ffrench-Mullen, I.M.S., or until further orders.

Major E. A. R. Newman, I.M.S., Officiating Civil Surgeon of Ranchi, is allowed combined leave for nineteen months, viz., privilege leave for three months with effect from the 20th March 1908, or any subsequent date on which he may be relieved of his duties.

Major R. H. Maddox, I.M.S., Civil Surgeon, Shahabad, is appointed to act as Civil Surgeon of Ranchi, during the absence on deputation, of Major R. Bird, C.I.E., I.M.S., or until further orders.

UNITED PROVINCES.

Lieutenant-Colonel G. H. Baker, I.M.S. Civil Surgeon, Cawnpore, privilege leave, combined with furlough, for a total period of eight months and nine days, from the 12th March 1908.

Major W. Young, I.M.S., Civil Surgeon, is transferred from Budaun to Cawnpore.

Temporary Civil Assistant Surgeon S. K. Chaudhry, on plague inoculation duty, Benares, to be Civil Assistant Surgeon, 3rd grade, to fill an existing vacancy.

CENTRAL PROVINCES.

First Grade Civil Assistant Surgeon Umachuran Ray, attached to the Harda Branch Dispensary, Hoshangabad District was deputed on special duty at the Burhman Fair in the Narsinghpur District, from the 26th December 1907 to the 28th January 1908.

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ON · 26^TH · AUGUST · 1886 · AGED · 88 ·
AND · OF · EMMA · CATHERINE · LYNES ·
DAUGHTER · OF · THE · ABOVE · WHO · DIED · AT · CHESTER
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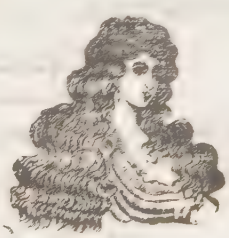

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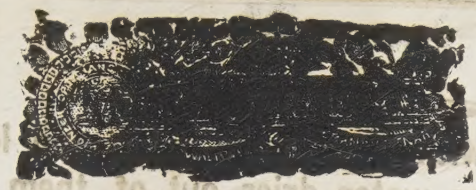

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